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COUNTY BOROUGH OF BOOTLE.



ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
FOR
1923.

F. T. H. WOOD, O.B.E., M.D. (Lond.), B.S., B.Sc., D.P.H.

Medical Officer of Health, School Medical Officer, Administrative
Tuberculosis Officer, and Medical Superintendent of Corporation
Hospital, Sanatorium, and Maternity Home.

BOOTLE :
BOOTLE TIMES, LIMITED, 30, ORIEL ROAD.

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BOOTLE TOWN COUNCIL, 1922-1923.

§†*HIS WORSHIP THE MAYOR (T. A. PATRICK, Esq., J.P.).

Mr. ALDERMAN BARBOUR, J.P.	†Mr. COUNCILLOR GARVEY.
†*Mr. ALDERMAN BOOTH, J.P.	§†*Mr. COUNCILLOR GRAINGER.
ALDERMAN SIR WM. CLEMMY, J.P.	Mr. COUNCILLOR HARRIS.
Mr. ALDERMAN J. H. JOHNSTON,	Mr. COUNCILLOR HAYWARD
J.P.	†Mr. COUNCILLOR HUGHES.
Mr. ALDERMAN JONES, J.P.	§†*Mr. COUNCILLOR MAHON.
Mr. ALDERMAN MACK, J.P.	Mr. COUNCILLOR MALINS.
§*Mr. ALDERMAN PEARSON,	§*Mr. COUNCILLOR MARMION.
M.R.C.S., J.P.	Mr. COUNCILLOR MARSH.
§*Mr. ALDERMAN ROBERTS,	†Mr. COUNCILLOR MITCHELL.
L.R.C.P., J.P.	§*Mr. COUNCILLOR PENNINGTON, J.P.
Mr. ALDERMAN SMITH, J.P.	§†*Mr. COUNCILLOR RAFTER, L.R.C.P.
Mr. ALDERMAN TOMLINSON.	§*Mr. COUNCILLOR REGAN, M.B.
§†*Mr. ALDERMAN TURNER,	†*Mr. COUNCILLOR ROBERTS.
M.A., M.D.	Mr. COUNCILLOR SANKEY.
Mr. COUNCILLOR ASHTON.	Mr. COUNCILLOR SCHOLEFIELD.
§†*Mr. COUNCILLOR BAUCHER.	§†*Mr. COUNCILLOR W. SCOTT.
Mr. COUNCILLOR BENSON.	Mr. COUNCILLOR J. SCOTT.
†Mr. COUNCILLOR BLACK.	Mr. COUNCILLOR SMITH.
§*Mr. COUNCILLOR CARROLL.	†Mr. COUNCILLOR SPENCE.
Mr. COUNCILLOR COLEMAN.	Mr. COUNCILLOR VAUX.
†Mr. COUNCILLOR EATON.	†Mr. COUNCILLOR WARBURTON.
Mr. COUNCILLOR FLYNNE.	Mr. COUNCILLOR WOLFENDEN.
Mr. COUNCILLOR GARDNER, J.P.	

* Member of Health Committee.

§ Member of Maternity and Child Welfare Sub-Committee.

† Member of Housing and Town Planning Committee.

HEALTH COMMITTEE.

Chairman—Mr. ALDERMAN TURNER, M.A., M.D., D.P.H., F.R.C.S.

Deputy Chairman of the Health Committee and Chairman of the Hospitals Sub-Committee—Mr. COUNCILLOR PENNINGTON; J.P.

MATERNITY AND CHILD WELFARE SUB-COMMITTEE.

Chairman—Mr. COUNCILLOR PENNINGTON, J.P.

This Committee consisted of members of the Health Committee (as indicated), together with the following representatives of the Bootle Health Society:—

The Mayoress—Mrs. PATRICK.

Chairman—Mrs. J. H. JOHNSTON, (ex-officio).

Honorary Secretary—Mrs. PEARSON.

Mrs. J. G. BLACKLEDGE.

Mrs. K. A. DODD.

and representatives of the Bootle Insurance Committee:—

Miss M. E. BARTON.

Miss B. A. VENABLES.

HOUSING AND TOWN PLANNING COMMITTEE.

Chairman—Mr. COUNCILLOR BAUCHER.

Deputy-Chairman—Mr. COUNCILLOR W. SCOTT.

STAFF OF THE PUBLIC HEALTH DEPARTMENT.

*Medical Officer of Health, Administrative Tuberculosis Officer, and
Medical Superintendent of the Corporation Hospitals—*

*F. T. H. WOOD, O.B.E., M.D., B.S., B.Sc. (Lond.), D.P.H. (Durh.)

Tuberculosis Officer and Deputy Medical Officer of Health—

*ROBERT HANNAH, M.C., M.B., Ch.B. (Edin.), D.P.H.

Assistant School Medical Officer and Assistant Medical Officer of Health—

*PURSER DAVIES, M.C., M.B., Ch.B. (Edin.), D.P.H.

Corporation Hospital, Linacre Lane.

*Matron—Miss M. JOHNSON.

Maghull Sanatorium.

*Visiting Medical Officer (Part-time)—**A. HENDRY, M.D. (Liverpool)

Matron—*Miss E. HOLDEN, R.R.C.

Maternity Home.

Matron—*Miss M. W. CLEARY.

*Chief Sanitary Inspector, Inspector under the Food and Drugs Acts, and
the Housing, Town Planning, etc., Acts, etc.—*

¹²R. J. McCULLOCH.

Sanitary Inspectors—

¹²B. J. HOLDEN.

¹W. ROBSON.

¹²J. YATES.

Clerical Staff—

Chief Clerk - N. LOCKWOOD.

W. E. BLUNDELL.

Miss THOMPSON.

*Miss THOMAS.

*Miss MAXWELL (Half-time).

R. TROTTER.

Infant Welfare Visitors—

*³⁴⁶Miss STOTT.

*¹Mrs. MCKOWEN.

*³⁴⁵Mrs. MEREDITH

*³⁴⁵Miss HUGHES.

*³⁴Miss STARK.

*Tuberculosis Nurse—**Miss KELLY.

Ante-Natal Clinic Medical Officer (Part-time)—

*A. L. ROBINSON, M.D. (L'pool), F.R.C.S. (Eng.)

¹ Certified Sanitary Inspector. ² Certified Inspector of Foods. ³ Certified Health Visitor.
⁴ Certified Midwife. ⁵ Half-time Tuberculosis Visitor. ⁶ Assistant Inspector of Midwives

* Contributions to salary by Exchequer grants.

HEALTH DEPARTMENT,

TOWN HALL,

BOOTLE,

March, 1924.

*To the Mayor, Aldermen, and Councillors
of the County Borough of Bootle.*

GENTLEMEN,

I have the honour to present herewith the fifty-first Annual Report on the work of the Health Department. Like that of the last two years, it is intended by the Ministry of Health that it shall be of the nature of an " Ordinary " Report, as contrasted with the " Survey " Report, which is to be called for every five years.

Attention may be directed to the following features of interest during the year:—

- (1) The second lowest death-rate recorded in Bootle.
- (2) The second lowest infantile mortality rate recorded in Bootle.
- (3) A satisfactory improvement in the incidence and fatality of scarlet fever and diphtheria.
- (4) The continued attention to public health educational work directed to securing the co-operation of the individual in efforts made to improve health and fitness.

It is almost superfluous to allude to the question of housing, additional provision of which remains the most pressing of the public health needs of the Borough; the deficiency in houses for the working classes, although in no way diminished during 1923, will be somewhat relieved in the coming year by the completion of one hundred houses, which it is proposed to erect under the Council's latest scheme.

I wish to express on behalf of the Department our gratitude to Mr. Alderman Turner for the interest shown and support given in the various extensions of public health work made during his nine years'

occupancy of the post of Chairman of the Health Committee, and to tender to Mr. Councillor Pennington, his successor in the chair, our best wishes for as fruitful a period of office.

In conclusion, it is a pleasure to record the continued good work of the staff, with special mention of the valued services of Mr. McCulloch, Chief Sanitary Inspector, and Mr. Lockwood, Chief Clerk, in their respective departments.

I have the honour to be,

Your obedient Servant,

F. T. H. WOOD,

Medical Officer of Health.

STATISTICAL SUMMARY FOR 1923.

Registrar-General's Estimated Population in July, 1923	...	81,580
Death-rate per 1,000 of the population	... ..	13.12
Birth-rate per 1,000 of the population	... ..	24.5
Infantile Mortality per 1,000 births	... ..	85
Death-rate from Phthisis per 1,000 of the population	... ..	1.26
Death-rate from all forms of Tuberculosis per 1,000 of the population	... ..	1.66

Area in Acres (inclusive of Dock Estate)	... ..	1,947
Area in Acres (exclusive of Dock Estate)	... ..	1,610
Population at Census of 1921	... ..	76,487
Population per Acre (excluding Dock Estate)	... ..	50.7
Number of Houses in the Borough on December 31st, 1923		13,730
Average Number of Persons in each structurally separate dwelling (at Census, 1921)	... ..	5.64
Number of Births	... ..	1,999
Number of Deaths	... ..	1,070
Natural increase of the population during the year	... ..	929
Number of Deaths of Infants (under the age of one year)	...	170
Death-rate from the seven principal Zymotic Diseases— Smallpox, Whooping-Cough, Measles, Diphtheria, Diarrhoea, Scarlet Fever and "Fever" (Typhoid, Enteric, and Typhus) per 1,000 of the population	... ..	0.81
Death-rate from Diarrhoea and Enteritis, of children under two years, per 1,000 births	... ..	9.5

The Rateable Value of the Borough for 1923-24 was ... £601,287
 A Penny Rate on the Borough Fund produced in 1923-24 ... £2,260
 In 1923-24 the Borough Rate was $6/9\frac{3}{4}$, and the total rates $11/6$ in the pound (excluding water rate and charges).

COUNTY BOROUGH OF BOOTLE.

ANNUAL REPORT
of the
MEDICAL OFFICER OF HEALTH.

I. VITAL STATISTICS.

Population. The Registrar-General's estimate of the population at mid-year 1923, was **81,580**, and from this figure the various rates in this report have been calculated.

A statement is given in Appendix II., on page 45, showing the population, persons per acre, and rooms per person, in each Ward in the Town at the Census enumeration in June, 1921.

Births. During the year 1,999 births to Bootle parents were registered, representing a birth-rate of **24.5** per 1,000 of the population, that for England and Wales being 19.7. In 1922 the Bootle birth-rate was 25.7 and for the decennium 1913-22 it was 26.8. There were 998 males and 1,001 females. It may be noted that the birth-rate, which rose from the abnormally low figures of the war period to a maximum of 29.7 in the first quarter of 1920, has continued to fall from that date, but is well above the figure for the country generally.

The illegitimate births numbered 56, and were 2.8 per cent. of the total; 23 took place outside the borough. In 1922 the total number was 64; in 1921, 60; and in 1920, 88.

The natural increase of population, *i.e.*, the excess of births over deaths, was 929, being a rate of 11.4 per 1,000 of the population; in 1922 it was 958, or 12.0 per 1,000; in 1921 it was 1,058, or 13.6 per 1,000; and in 1920 it was 1,153, or 14.4 per 1,000.

Deaths. The number of deaths registered in Bootle during the calendar year was 858; this number includes the deaths of 50 non-residents which occurred in the borough, 43 of whom died in the Borough Hospital, five in Linacre Hospital, one in the Liverpool Maternity Home, and one in the Bootle Maternity Home. Two

hundred and sixty-two persons who died in other parts of the country were stated to have been inhabitants of Bootle; these include 188 who died in Poor Law Institutions, 40 who died in Voluntary Hospitals in the City of Liverpool, and 22 in Lunatic Asylums.

When the necessary adjustments in these respects have been made the total number of deaths assigned to Bootle is 1,070, which is a death-rate of **13.1 per 1,000** of the population. This rate is the second lowest ever recorded in Bootle, the next best having been 13.7 in 1922, 13.0 in 1921, and 14.2 in 1920, while the death-rate in Bootle for the decennium 1913-1922 was 16.3, and for 1903-1912, 17.6. The crude death-rate of the 105 great towns of England and Wales during 1923 was 11.6, compared with 13.0 in 1922 and 12.3 in 1921.

The death-rate during the first quarter of the year was 14.9, during the second, 12.8; the third, 11.5; and the fourth, 13.2.

The number of deaths which occurred in institutions was 394, *i.e.*, 37 per cent. of the total deaths, compared with 36 per cent. in 1922, and 38 per cent. in 1921.

Mortality in Relation to Sex. There were 583 deaths of males, and 487 of females.

Infantile Mortality. There were 170 deaths of infants, compared with 164 in 1922, 198 in 1921, and 223 in 1920. The infantile mortality rate was **85 per 1,000** births, compared with 80 in 1922, 96 in 1921, 97 in 1920, and 111 in the decennium 1913-1922. It is the second lowest ever recorded in the town. The rate of infantile mortality amongst males was 104, and amongst females 66. Throughout England and Wales the rate of infantile mortality was 69 per 1,000 births, and in the 105 great towns it was 72.

This important subject is dealt with in detail in a later section on pages 32 to 36.

Thirty-five children died before they were a week old, and a total of 70, or 41 per cent., of all the deaths under one year, occurred in children under the age of one month. This is a neo-natal mortality rate of 35.0 per 1,000.

Child Mortality. In 1923 there were 115 deaths of children aged 1 to 5 years, as compared with 142 in 1922, and 123 in 1921. The

principal causes were—respiratory diseases 50 (including 35 from broncho-pneumonia); measles 18; whooping cough 10; tuberculosis 10; diarrhoea 4; meningitis 7; and accidents 7. It is noteworthy that all the above are, in theory, preventable causes, although, at present, conditions of unemployment, overcrowding, and imperfect knowledge of infant care, militate against the realisation of the theory in practice.

Uncertified Deaths. Sixty-nine deaths (52 of residents and 17 of non-residents) were the subject of a Coroner's inquest, while in 33 cases the death was registered without certification by a medical man or the Coroner.

Causes of Death. The causes of death, classified according to age, are shown in the table on page 47.

Tuberculosis in one form or another was responsible for 135 deaths, or 12·6 per cent. of the total, as compared with 130, or 11·9 per cent. in 1922; and 140, or 13·9 per cent. in 1921. This matter is further dealt with in the Tuberculosis Section of this report.

Pneumonia was responsible for 149 deaths, bronchitis for 85, and other respiratory diseases for 13, making the total deaths from respiratory diseases (excluding tuberculosis) 247, or 23·1 per cent. of the total deaths at all ages, as compared with 266, or 24·3 per cent. in 1922. Influenza was entered as a cause of death in only 10 cases, as compared with 23 in the preceding year.

The group of diseases included under the heading "congenital debility and malformation, including premature birth," accounted for 80 deaths, compared with 64 in 1922. This matter is again alluded to in the Maternal and Child Welfare Section of this report.

The epidemic diseases (excluding influenza) were responsible for 66 deaths, as compared with the average of 135·2 during the preceding ten years. There were 25 deaths from measles, as contrasted with 27 in 1922, 2 deaths from diphtheria, as contrasted with 10 in 1922, 14 deaths from whooping cough, as against 32 in the previous year, and 2 deaths from scarlet fever, as against 14.

The deaths from diarrhoea and enteritis were 23, as against 17 during 1922; of these 19 were in children under two years of age.

Cancer was registered as the cause of death in 73 cases, as contrasted with 66 in the preceding year; and deaths from violence numbered 44 (including 5 from suicide), as contrasted with 42 in the previous year.

II. SANITARY ADMINISTRATION.

Closet Accommodation and Scavenging. Every house, with the exception of 23 in the outlying parts of Orrell, is provided with one water closet or more, the conversion of middens having been completed in 1910.

The following is the number of ashbins and ashpits in the Borough; the ashbins were emptied weekly, the ashpits every four to five weeks, and the middens every eight weeks:—

	1923.	1922.	1921.	1920.	1914.
Ashbins	5366	5285	4899	4780	4645
Ashpits, single ...	1316	1397	1429	1436	1486
Ashpits, double ...	4216	4239	4295	4311	4336
Middens, single ...	21	21	21	21	21
Middens, double ...	2	2	2	2	2

Ashpit Conversions. The scheme for ashpit conversions under the Bootle Order, 1914, given in the 1920 Annual Report was proceeded with, and 133 further notices were served, requiring the substitution of moveable ashbins for fixed ashpits in certain congested areas with small yard space; in 97 cases the work has been completed, and in the remaining 36 is being carried out by the Corporation at the request, or in default, of the owners. Since the commencement of this scheme in November, 1920, 273 houses have been dealt with, and further progress is being made during the current year.

Refuse Disposal. Further consideration has been given during the year to the two aspects of refuse disposal, namely, the incineration of the material collected, possibly following upon a preliminary separation of certain constituents, and the subsequent deposition of ash, clinker, or dust, within or without the Borough. Progress has been made with the latter half of the question by the decision of the Council in May duly approved by the Ministry of Health, to purchase 126 acres of agricultural land at Melling, as a site for a refuse tip. The site borders upon

the canal and the road, and is computed to be sufficient for Bootle needs for forty years. Nothing other than clinker, ash, or finely-screened dust is to be deposited, and the site will not be taken into use until the available land now in use on the east side of the Borough is exhausted in a year or two.

The former question, namely, the immediate treatment of the material collected has also been considered, and tenders have been invited for the erection of new destructor plant for the existing station at Pine Grove.

SANITARY INSPECTION OF THE DISTRICT.

The staff for this work consisted of the Chief Sanitary Inspector, with three assistants, one of whom is engaged principally on special duties mainly in connection with food inspections.

Nuisances. On page 49 will be found a tabular statement showing the number of inspections made, and notices served, by the Chief Sanitary Inspector. It will be noted that the number of defects for which notices were served on owners shows a small decrease from 3,068 in the previous year to 2,961 in the year under review; the other work done under the Housing Acts is set out in the Housing Section of this report on pages 39 to 43.

Contagious Diseases of Animals Acts. The administration of these Acts in so far as relates to the disinfection of premises is in the hands of the Health Department. During the year one case of parasitic mange was reported, compared with 3 in 1922, and 14 in 1921. The case occurred in a brick stable, and satisfactory disinfection was obtained.

III. SANITARY CONTROL OF THE FOOD SUPPLY.

One of the Sanitary Inspectors holding the special food certificate of the Royal Sanitary Institute is engaged for the greater part of his time on work connected with the food supply.

Milk Supply. That portion of the milk supply of the Borough which is not brought in by rail is derived from cows kept in shippens, of which there are now 25 in the town; the cows number approximately 320, a decrease from the pre-war figure of about 550. All the shippens received the careful attention of the Inspector, who paid 451 visits to them during the year.

Food Inspection. As in 1914, there was only one slaughter-house in the Borough, and this was not used during 1923.

The food shops, which received frequent visits of inspection, numbered 635—butchers 69, grocers 126, fish 84, fruit and vegetables 106, bread and flour 66, dining rooms 32, and other food shops 152.

The amount of unsound food detected is shown in the table below—all was voluntarily surrendered.

				Tons.	Cwts.	Qrs.	Lbs.
Meat, uncooked	...	...		—	2	3	10½
Meat, canned	...	...		—	12	2	23
Fruit and Vegetables	...	...		—	—	—	5
Fruit and Vegetables, canned				—	8	2	19½
Condensed Milk	...	...		1	5	3	13½
Fish	...	...	...	—	7	2	0
Fish, canned	...	...	...	—	2	3	26

Not included in the above table are two large warehouse deposits of salted fish packed in barrels, which had been in store for several years, and had become offensive. Approximately 17 tons were in question, and after the service of nuisance notices the fish were disposed of for working up into artificial manure.

Food Factories. There are fifteen factories in the town, which received 184 visits of inspection. On all occasions the condition of the large establishments was satisfactory, and certain improvements in method and equipment were obtained in others. Forty-seven premises are now registered under the Bootle Corporation Act, 1921, as used for the preparation of potted or preserved foods.

Bakehouses. There are 29 bakehouses (15 being underground), and 20 confectionery bakehouses. Three hundred and twenty-one visits of inspection were paid to them during the year. The general condition is good, those underground being in many instances as airy, well lighted, and well ventilated as those on ground level.

Sale of Food and Drugs Acts. The Public Analyst is Mr. W. H. Roberts, M.Sc., F.I.C. Table 7 on page 53 shows that 202 samples were taken, of which 102 were milk. The reports show that 22 samples in all, or 10·9 per cent., were adulterated or not up to standard.

The majority of the samples were taken informally through purchase by an agent, and in cases where adulteration was detected a formal sample was then taken in order that the necessary legal action might be instituted; in 77 milk cases, and in four other instances, however, the procedure prescribed by the Act was adopted. Thirteen of the milk samples were reported on adversely by the Public Analyst; of these, three were slightly deficient in fat, and three were slightly watered; the vendors were cautioned; in three other instances there were deficiencies of 29, 18, and 7 per cent. of fat, and the remaining four contained 12, 12, 7, and 4 per cent. of added water. A conviction was obtained under the Sale of Food and Drugs Acts in each of the latter seven cases; one dealer was summoned for not having his name and address conspicuously inscribed on his vehicle; the resulting fines and costs amounted to £23 7s. 6d. Although four at least of these were serious offences it is worthy of note that the fines inflicted were never more than 40/-, although Section 17 of the Sale of Food and Drugs Act, 1899, provides that the maximum for a first offence may be twenty pounds, for a second offence fifty pounds, and for any subsequent offence one hundred pounds.

Thirty-one of the milk samples were taken at the railway stations in the town, and of these one was slightly watered, two others each contained 12 per cent. of added water, one contained 7 per cent. of added water, and one was deprived of 6 per cent. of its fat.

The Public Analyst has kindly supplied me with the result of the analysis of every sample of milk submitted to him from Bootle, and it is interesting to note that, including the samples returned "not genuine," the average amount of cream was 3.58 per cent., and of non-fatty solids 8.9 per cent., the minimum standards fixed by the Board of Agriculture in the Sale of Milk Regulations, 1901, being 3 per cent. fat and 8.5 per cent. non-fatty solids, below which figures the milk is presumed to be not genuine.

Forty-five samples of butter were taken for analysis, and all were found to be genuine. One sample of potted shrimps purchased informally contained 0.69 per cent. borates. A formal sample subsequently purchased from the same vendor was found to contain 0.7 per cent. borates. The magistrates fined the defendant 10/-, and ordered him to pay £2 2s. 0d. analyst's fees. Two samples of lemon cheese were found to contain small quantities of borates and salicylic acid, and the manufacturers were written to.

In four instances drugs were found to be adulterated; two of these were informal samples. In one case the chemist was cautioned; the remaining sample was certified to have an excess of 60 per cent. of the potassium iodide, and a deficiency of 30 per cent. of the spiritus ammoniac aromaticus prescribed. The vendor was fined £5 and ordered to pay £1 16s. 6d. costs.

A sample of rice was found to contain a small quantity of talc; no action was taken.

Public Health (Milk and Cream) Regulations. One hundred and two samples of milk were examined under these Regulations for the presence of preservatives; none was found. Two samples of preserved cream were submitted for analysis, and both contained less than the maximum amount of preservative allowed by the Regulations.

IV. PREVALENCE OF NOTIFIABLE DISEASES.

Zymotic Diseases. During the year there were 66 deaths from the seven principal zymotic diseases, which are smallpox, measles, whooping cough, diphtheria, scarlet fever, diarrhoea, and fever (including typhoid, enteric, and typhus). This is a death-rate of 0·81 per 1,000 of the population; it compares with a decennial rate for 1913-1922 of 1·8.

The number of cases of infectious diseases notified during the year is briefly summarised below, and fuller detail is given in Table 3, page 46. There was no notification of smallpox, cholera, plague, relapsing or continued fever, trench fever, or malaria.

	Total cases notified.	Cases admitted to hospital.	Total deaths.
Diphtheria	86	75	2
Scarlet Fever	231	181	2
Enteric Fever (including paratyphoid)	2	2	—
Puerperal Fever	5	3	—
Ophthalmia Neonatorum	31	3	—
Erysipelas	22	8	1
Encephalitis Lethargica	9	7	—
Cerebro-spinal Fever	2	1	2
Polio-myelitis	3	2	—
Infantile Diarrhoea (under two years)—voluntarily notifiable...	47	—	19

			Total cases notified.	Cases submitted to hospital.	Total deaths.
Influenzal Pneumonia	...	...	2	—	—
Acute Primary Pneumonia	...	...	72	14	—
Dysentery	...	...	6	—	—
Tuberculosis—					
(a) Pulmonary	...	...	236	143	103
(b) Non-Pulmonary	...	...	66	26	32

Diagnosis of Infectious Disease. On nineteen occasions the Medical Officer of Health was asked by private practitioners to see in consultation at their homes cases in which the diagnosis of infectious disease was suspected; among other conditions the question of smallpox arose eight times, and the diagnoses formed in respect of these latter included chickenpox, lichen, impetigo, herpes, pemphigus, and an application dermatitis. The remaining instances in which an opinion was asked were suspected cases of encephalitis lethargica, typhus fever, scarlet fever, diphtheria, and measles.

Scarlet Fever. Two hundred and thirty-one cases were notified, being a rate of 2·83 per 1,000 of the estimated population, compared with 4·3 in 1922. For several years past, certainly from 1914 or 1915, this town and its neighbours in South-Western Lancashire have occupied unfavourable positions in the Registrar-General's Comparative Tables of Scarlet Fever Mortality, Bootle, indeed, taking first place in 1921; this position was, it is to be feared, retained in 1922, although the Registrar-General's Annual Report for that year is not yet available.

In view of the fact that the general death rates and the other zymotic disease death rates of this area are relatively low, it seems probable that the local strain of scarlet fever infection is of a high degree of virulence.

During 1923 the disease was of a milder type, and resulted in three deaths (one of which was complicated by general tuberculosis), or a case mortality of 1·3 per cent., as contrasted with 2·97 per cent. during the decennium 1913-1922.

In each of 21 houses two cases of scarlet fever occurred; in each of four there were three cases, and in one other four cases.

Return Cases. During 1923 there were 8 instances in which the discharge of a scarlet fever patient from hospital was followed by the

occurrence of a new case in the home, and taking all the hospital discharges (including those to Litherland and Formby) the return cases equalled 3·1 per cent. of those discharged; this compares with 6 per cent. in 1922, 4 per cent. in 1921, and 3·8 per cent. in 1920. The length of stay in hospital averaged 34 days, and the interval elapsing before the onset of the new case was 26 days in three instances.

Hospital Accommodation. One hundred and eighty-one, or 78 per cent. of the cases notified were treated in Linacre Hospital, with a mortality rate, among the cases in which the diagnosis of scarlet fever was confirmed, of 1·7 per cent. as against the figure of 5·3 per cent. in the previous year.

Diphtheria. The number of cases notified—86—shows a satisfactory fall from the previous year's figure of 128, and is also well below the average of 110 for the ten years ended 1922. The incidence was 1·05 per 1,000 of the estimated population. Last year's decline in case mortality to 7·8 per cent. was more than maintained, the figure for 1923 having been 3·5. Seventy-five cases, or 87 per cent. of those notified were removed to hospital. An examination of the three fatal cases (one of which was complicated with measles), shows the illness to have commenced six days, nine days, and three weeks respectively before admission to hospital, and death to have occurred two days, sixteen days, and seven hours respectively after such admission. Tracheotomy was performed in two of these cases.

In the cases of diphtheria patients nursed at home, antitoxin is supplied by the Authority.

Multiple cases of diphtheria, as in the previous year, accounted for a proportion of the notified cases, two cases having occurred in each of four houses, and four in another.

Smallpox. Outbreaks of smallpox, mainly of a mild type, continued to arise in various parts of the Midlands and West of England during 1923, but no case occurred in Bootle, although on eight occasions my opinion was asked in instances where the diagnosis of smallpox was suspected.

According to information kindly supplied to me by the Clerk to the West Derby Union, 1,800 successful primary vaccinations and 26

successful re-vaccinations were performed, as compared with the previous year's figures of 1553 and 25 respectively; this is a very satisfactory increase brought about by various factors, and means that 90 per cent. of the infants born received necessary protection.

Enteric Fever. There were two notifications of enteric fever, one in a ship's officer who arrived home ill after ten weeks' absence from Bootle, having contracted the infection elsewhere; and a second in a lad of fifteen years, in whom the source of infection was not detected.

Typhus Fever. In July one of the honorary medical staff of the Bootle Borough Hospital requested the Medical Officer of Health to see an in-patient with an uncommon rash which, in his opinion, resembled the description of the rash of typhus fever. The diagnosis was provisionally confirmed, the patient was removed to Linaere Hospital, and all appropriate action with respect to premises, contacts, and bedding, was at once taken.

Although the clinical picture presented by the patient when first seen agreed in almost all respects with cases of typhus fever seen abroad, and more recently in a neighbouring borough, the subsequent course of the illness was not typical, and the provisional diagnosis was withdrawn. The family and workplace contacts were kept under observation for fourteen days, but no abnormal symptoms occurred.

Influenza. Two notifications of influenzal pneumonia, and ten deaths from influenza were recorded. Although the use of the term "influenza" is not as strictly delimited as in the case of other infectious diseases, these low figures conform with general opinion as to the absence, even of a mild type, of the influenza which in epidemic form visited the district in 1918, in 1919, and in the first quarter of 1922.

Measles. During 1923 measles caused 25 deaths, compared with 27 in 1921, and an average of 23 during the ten years ended 1922. The Bootle death-rate from this cause was 0·31 per 1,000, compared with 0·14 throughout England and Wales.

Complete information as to the incidence of measles is not now available, but during the year 259 cases occurring in school children were reported under the Bootle Corporation Act, 1920; they represented the usual biennial epidemic, which, however, was not apparently as widespread as usual.

Whooping Cough. Whooping cough caused 14 deaths during 1923, compared with 32 in 1922, and 16 in 1921. The death-rate was 0·17 per 1,000 of the population, compared with 0·10 throughout England and Wales.

Diarrhoea. Deaths from this disease numbered 23, or a rate of 0·28 per 1,000 of the population as compared with 0·2 last year. Nineteen of the deaths occurred in children under the age of two years, giving a rate per 1,000 births of 9·5 in Bootle, as compared with 7·7 throughout England and Wales.

The arrangements instituted in previous years by which this disease is notifiable during the third quarter were continued, and 47 notifications were received, as compared with 7 in 1922, 115 in 1921, and 15 in 1920. The receipt of these notifications enabled instruction on the necessary sanitary precautions against the spread of infection to be given by the Infant Welfare Visitors, as well as nursing attention to be given by the Bootle District Nurses' Association, the staff of which attended 19 cases, making 209 visits in all.

LINACRE ISOLATION HOSPITAL.

The year 1923 was the lightest recently experienced in the working of the isolation hospital, and the following table gives particulars of the cases admitted to the infectious disease wards. It shows a large falling off in scarlet fever admissions as compared with the previous year, and an even greater fall in diphtheria cases, which latter is the more noticeable when the number of cases in which the diagnosis was confirmed after observation in the hospital is considered (58 in 1923 as against 106 in 1922). Particulars of cases in which the diagnosis was so revised are given in Appendix 13 on page 59.

CASES TREATED IN THE INFECTIOUS DISEASE WARDS, LINACRE HOSPITAL.

DISEASE.	No. in hospital on 31st. December, 1922.			No. admitted during the year.			No. discharged during the year			No. died during the year.			No. remaining in hospital 31st. December 1923.							
	Booth	Lither- land	Formby	Total	Booth	Lither- land	Formby	Total	Booth	Lither- land	Formby	Total	Booth	Lither- land	Formby	Total				
Scarlet Fever.	20	17	—	37	163	71	1	235	168	80	1	249	2	2	—	4	13	6	—	19
Scarlet Fever complicated by other Disease.	1	—	—	1	6	4	—	10	6	3	—	9	1	1	—	2	—	—	—	—
Admitted as Scarlet Fever but diagnosis revised.	1	—	—	1	12	3	—	15	14	2	—	16	—	—	—	—	—	—	—	—
Diphtheria.	5	5	—	10	30	17	2	49	30	19	2	51	3	1	—	4	2	2	—	4
Diphtheria complicated by other disease.	2	2	—	4	5	4	—	9	7	6	—	13	—	—	—	—	—	—	—	—
Admitted as Diphtheria but diagnosis revised.	—	1	—	1	40	8	—	48	33	8	—	47	—	—	—	—	1	1	—	2
Other Diseases	—	—	—	—	2	—	—	2	1	—	—	1	1	—	—	1	—	—	—	—
TOTALS	29	25	—	54	258	107	3	368	265	118	3	386	7	4	—	11	16	9	—	25

Tracheotomy.—Tracheotomy was performed on three cases for laryngeal diphtheria; one recovered.

Cross Infection. The usual difficulty attaching to the administration of an isolation hospital, whereby a patient admitted for one disease happens to be incubating a second disease, or to be erroneously diagnosed, with the resulting cross-infection of other occupants of the ward, was experienced during the year. Four cases admitted as diphtheria subsequently contracted scarlet fever, and two measles. Four cases admitted as scarlet fever subsequently contracted chickenpox, three diphtheria, and two cases not suffering from scarlet fever at the time of admission subsequently developed it. Further, although only three cases of clinical diphtheria arose in the scarlet fever wards, in February, March, and the beginning of April, a large number of the patients therein were found to be infected with the diphtheria organism in nose or throat. Five of the nursing staff in these wards also were found to be similarly infected at the same time; one member of the nursing staff had to be relieved of duty from 24th February to 20th April owing to her carrier condition, while four other members who were carriers for shorter periods were dealt with by being transferred to duty in the diphtheria or tuberculosis pavilions. By the end of April the staff and wards were free from diphtheria carriers, and from then until the end of the year only occasional positive swabs were found.

Diphtheria Susceptibility and Immunisation. During the latter part of the year all scarlet fever admissions were submitted to the Schick test, a reaction which indicates whether or not the individual is susceptible to diphtheria. The test was applied to 53 children, of whom 18 gave a positive reaction, indicating susceptibility, while 35 gave a negative reaction; it is desirable that the former class should be immunised in view of the risk indicated above of contracting diphtheria while in the isolation hospital, but as the present toxin-antitoxin confers no protection until a lapse of time greater than the average patient's stay, nothing has so far been done in this direction. With regard to the staff, however, ten Schick tests have been done, one of which was positive; this was in the case of a nurse who subsequently received the necessary amount of toxin-antitoxin to confer immunity.

Bed Accommodation. In July a report was issued by the Chief Medical Officer of the Ministry of Health referring to the ill effects of overcrowding in isolation hospitals in increasing the risk of complications and sequelae, as illustrated by a recent occurrence elsewhere. Opportunity was therefore taken to reconsider the bed accommodation in the

infectious wards at Linaere Hospital in the light of modern practice, and a reduction of the recognised number of beds in each ward was recommended. The revision, which was approved by the Council, now provides 37 beds for scarlet fever, 16 beds for diphtheria, and 15 beds in other four wards available for the reception of mixed infections or for observation cases. In addition, Pavilion V., first erected for the reception of smallpox cases, and more recently utilised for the reception of late cases of tuberculosis until the opening of the new Pavilion in May, 1922, has been re-roofed, and when certain heating improvements have been effected, can accommodate other 18 cases; this accommodation may be used either as an overflow provision for scarlet fever, or possibly for the treatment of a limited number of cases of measles complicated by bronchitis or broncho-pneumonia.

Heating of Scarlet Fever Wards. The inadequate heating of Pavilion IV. had been realised for some time past as a possible cause of certain sequelae of scarlet fever, leading to prolonged detention of patients, and it is satisfactory therefore to record that in the autumn a new heating installation was provided, which by a low pressure hot water system is giving satisfactory temperatures in both of the scarlet fever wards from one common boiler.

Staff Quarters. The pressing question of additional accommodation for the nursing and domestic staff at last received a satisfactory solution by the Ministry of Health according sanction to the Council's proposals to adapt and erect two army huts on land adjoining the present hospital grounds. The building, which has now been completed, provides excellent accommodation for twelve nurses, and when it is taken into use in April, 1924, will enable the full opening of the already provided tuberculosis beds in Pavilion VII. to take place, and will also give much-needed relief in the existing Home.

Bacteriological Laboratory Work. The following are particulars of the examinations carried out at the Linaere Hospital Laboratory, Tuberculosis Dispensary, and Maghull Sanatorium:—

Examination required.					Positive Result.	Negative Result.	No. of Specimens examined.
Swabs for Diphtheria	...	..			197	1996	2193
Sputa for Tubercle Bacilli	...		...		230	391	621
Others	...	...	...	...	—	3	3
					427	2390	2817

In addition, 12 samples of milk, 1 specimen of blood for Widal reaction, seven specimens for diphtheria virulence test, 358 specimens for venereal disease, and 8 miscellaneous specimens, were examined by Professor Beattie in the Pathological Department of the Liverpool University.

Y. TUBERCULOSIS.

Deaths. The number of deaths caused by tuberculosis during 1923 was 135, or one death in every eight, giving a death-rate from this cause of 1·66 per 1,000 of the population, as compared with 1·6 in 1922 and 1·8 in 1921; it was 1·8 for the ten years ended 1922.

The tabular statement which follows demonstrates that although the high death-rates obtaining during the war period do not now prevail, the borough, in common with neighbouring areas, has a marked excess in tuberculosis incidence over the country generally.

TUBERCULOSIS (ALL FORMS).

Year.	Cases notified.	Deaths.	Death-rates.	Death-rate in England and Wales.
1913	375	120	1·6	1·34
1914	325	113	1·5	1·35
1915	319	143	2·0	1·55
1916	324	179	2·3	1·62
1917	267	151	1·9	1·80
1918	228	160	2·2	1·92
1919	203	110	1·4	1·26
1920	216	128	1·6	1·13
1921	299	140	1·8	1·12
1922	284	130	1·6	1·12
1923	302	135	1·66	

PULMONARY TUBERCULOSIS.

Incidence. Two hundred and thirty-six persons were notified as suffering from pulmonary tuberculosis, of whom 42 were ex-service men. The age and sex distribution of the patients will be found on page 54. The numbers notified in the three preceding years were 224, 220, and 168, respectively. In the case of eighteen the first intimation was obtained from the death returns, while in 33 other cases notification

was made at intervals of less than three months before death. The non-notified deaths, therefore, numbered 17 per cent. of the total of 103 deaths from pulmonary tuberculosis.

Deaths. During the year 103 deaths were certified to be due to pulmonary tuberculosis, representing a rate of 1.26 per 1,000 of the population, as compared with 1.2 in 1922, and 1.5 in 1921.

Tuberculosis Visitors. Three tuberculosis visitors, one of whom assists in the medical work of the Dispensary, and two of whom are also engaged on work in connection with Maternity and Child Welfare, are responsible for the sanitary supervision of the homes of notified and suspected cases; they paid 2,543 visits to the homes of the 1,296 persons suffering from pulmonary tuberculosis in Bootle. During the year 103 cases died, 238 new cases were added, and 167 were discharged or left the district; 1,038 were on the books at the end of December.

Tuberculosis Dispensary. Persistent attention has continued to be paid to securing the attendance for examination of contacts of notified cases, and during the year 176 were so examined. As a result, 25 were pronounced to be definitely suffering from tuberculosis, and 14 were still under observation at the end of the year, while the remainder were considered to be non-tuberculous.

During the year 249 new patients, of whom 36 were sent by private practitioners for opinion, were examined at the Dispensary; 167 were diagnosed as suffering from tuberculosis, 5 were still under observation at the end of the year, and 48 were considered to be definitely non-tuberculous. The total attendances at the Dispensary during the year numbered 6,803, as compared with 7,477 in 1922; 322 specimens of sputum were examined, giving a positive result in 67 cases.

The decreasing attendances during the last two years are due, not to any falling off in the number of new cases unfortunately, but mainly to the policy pursued of referring to their own doctor such cases as are not at the time in need of specialist supervision or treatment (sanatorium, hospital, X-ray, etc.); touch is maintained with these patients through the medium of the Tuberculosis Visitors, as well as through the quarterly reports which insurance practitioners render to the Tuberculosis Officer. Another factor contributing to the decreased attendances is the sustained attempt to establish a negative or positive diagnosis with the minimum number of visits by the patient; the success

of this attempt is shown by the fact that of 723 patients in attendance at the Dispensary on the 29th December, 1923, only 45 were entered as under observation pending diagnosis, and of these only three had been so classified for periods longer than two months.

The dispensary has no X-ray apparatus, but during the year nine cases were sent by arrangement to local hospitals for radiographic examination and report.

Maghull Sanatorium. During the year 75 patients were admitted to the Institution with an average length of stay of 99 days. During the year ended 30th September, 1923, 67 patients were discharged, and of these 40 were known to be fit for work in December, 1923. The complete tables presented in previous years, indicating the condition of all patients who had passed through the Sanatorium since its opening in May, 1914, have been brought up-to-date, and in brief show that of 432 cases discharged before September, 1922, 187 were known to be fit for work in December, 1923; while of 231 of the above cases in which tubercle bacilli had been found in the sputum, 53 were known to be fit for work in December, 1923. These 53 sputum-positive cases include 5 who had been discharged ten years, 5 discharged nine years, 4 discharged eight years, 8 discharged seven years, 5 discharged six years, and 7 discharged five years previously.

The extension to the wards of the new hot water supply system installed last year in the Administration Block was completed, and it is expected that the difficulty formerly experienced owing to the hardness of the water will not now recur.

LINACRE HOSPITAL: TUBERCULOSIS PAVILION.

Use of the new pavilion opened in May, 1922, remains on the same basis as in the previous year, and owing to lack of staff accommodation 16 beds only were in occupation. This question has now been satisfactorily settled by the erection and furnishing of the new hutment quarters referred to elsewhere. It is expected to take these into use in April, 1924, after which date it will be possible to utilise the excellent patients' pavilion completed in 1920.

A very satisfactory wireless installation for the entertainment of the patients was provided and fixed during the year, the cost being defrayed out of voluntary funds raised by one of the hospital staff.

During 1923, 68 cases were admitted to the pavilion, the average length of stay of the 51 cases discharged during the year being 64 days. The diagnosis was revised to non-tubercular conditions in five instances, and amongst the cases of tuberculosis proper there were eight deaths.

Dental Treatment. The scheme for the provision of dental treatment in cases recommended by the Tuberculosis Officer has been continued, and in all 18 cases completed treatment during the year; further, 7 cases discontinued treatment, and 2 were carried forward to 1924. The approximate cost of this treatment was £9 14s. 0d., of which the patients' contributions were assessed at 10s.

Ex-Service Patients. Forty-two ex-Service patients came under treatment in 1922; 3 died, 22 received dispensary treatment, and 17 were admitted to institutions. For the year ended 31st March, 1924, 666 visits were paid to the homes of the 111 ex-Service patients, who are, or were, under supervision.

NON-PULMONARY TUBERCULOSIS.

During the year 66 cases of non-pulmonary tuberculosis were notified, as compared with 60 during 1922, namely:—26 glands, 12 bones and joints, 20 abdominal, 4 meningitis, 2 spine, and 2 larynx; and there were 32 deaths registered. The agreement with the Leasowe Hospital for Children for the maintenance of six beds for children suffering from non-pulmonary tuberculosis remained in force, and 5 cases were admitted during the year in place of other 5 discharged.

The scheme for admission to local general hospitals of adult cases of non-pulmonary tuberculosis, and for payment by the Council of the charges for maintenance and treatment in cases recommended or approved by the Tuberculosis Officer, was continued. During the year four such patients have been admitted to the Bootle Borough Hospital, twelve to the Stanley Hospital, and one to the David Lewis Northern Hospital; nine of these were recommended by the Tuberculosis Officer, and eight were subsequently approved by him after admission as urgent cases.

Cost. The total approximate net expenditure, after deducting receipts of grants-in-aid, on the prevention, diagnosis, and treatment of tuberculosis during the financial year 1923-24 was £2,742, and the corresponding amount for 1924-25 is estimated to be £3,513.

VI. VENEREAL DISEASES.

The Council's scheme for diagnosis and treatment of venereal diseases through the treatment centre at the Bootle Borough Hospital was continued as in previous years, and three clinics were held weekly for men and three for women and children.

In December the Ministry of Health commented on the very small attendances at the Thursday mid-day Clinic for women, and raised the question of its closure. The Hospital Authorities, however, suggested as an alternative to such reduction in the number of female sessions that the time of meeting be changed to 6-30 p.m. on the same day; this has been provisionally approved, and its effect on the total female attendances will be hopefully watched, for in Bootle, as elsewhere the number of women presenting themselves for treatment is far below the total of male patients

The Annual Statistical Report of the Medical Officer of the Treatment Centre will be found on page 56. It shows 222 persons under treatment on the 1st January, 1924, the same number as on the 1st January, 1923, and a slight fall in the number of new cases, the figures being 360 as contrasted with 367 in 1922, and 400 in 1921. The total attendances for treatment made at the clinic during the year show a decrease from 5,046 to 4,793; the figure includes 838 attendances made between clinic days for the treatment of gonorrhoea at the irrigation centre. In-patient days totalled 289, as contrasted with 487 during the previous year. During 1923, 144 cases were discharged after completion of treatment and observation, as contrasted with 136 during 1922.

The table below shows the steady decline in the number of cases presenting themselves for treatment since the abnormal figures reached at the end of 1919, and this decline may, I think, fairly be taken as running parallel with an actual decrease in the amount of new infections arising; although for the time being it would seem to have met with a check.

BOOTLE VENEREAL DISEASES CLINIC.

	1919.	1920.	1921.	1922.	1923.
New cases (total)	597	495	400	367	360
New cases (syphilis)	245	225	200	183	186
Total attendances (excluding Irrigation Department)	4827	5099	4448	4070	3955
Irrigation Department attend- ances	—	—	785	976	838
In-patient days	502	309	335	487	289
No. discharged after completion of observation and treatment	177	217	142	136	144

Bootle residents accounted for 50 per cent. of the cases under treatment at the Bootle Hospital Centre, and for 64 per cent. of the attendances, the Authorities contributing the next largest number of cases being the Lancashire County Council and Liverpool, which together made up a total of 34 per cent.

Closer examination can be made this year of the difficulty experienced from a proportion of the cases discontinuing attendance before the condition has been rendered non-infective; such cases can now be analysed into cases ceasing to attend before completion of treatment, and those ceasing after completion of treatment, but before final tests as to cure. The former figure stands at 87 cases during the year, and the latter at 92, so the position is that the treatment of one case in seven is not carried to the point of safeguarding the public health, although the patient's own symptoms may have been relieved.

Consequently, as has been stated in previous years, the next step forward must be the adoption of means of securing continuity of treatment without prejudicing the position of those who recognise their obligation to society, and persevere with treatment; and in common with other Merseyside Boroughs support has been given by Bootle to representations made to the Ministry of Health on the advisability of making it a statutory obligation for sufferers to obtain treatment, and for the patient's medical adviser to notify the Medical Officer of Health of cases discontinuing treatment without adequate reason.

Educational propaganda work was continued through the Merseyside Boroughs Branch of the National Council for Combating Venereal Diseases until the middle of the year, when that body dissolved itself, and was succeeded by the Merseyside Boroughs Venereal Diseases Education Committee, consisting of representatives of the Health Committees of the four Merseyside Boroughs with their respective Medical Officers of Health. Under the auspices of these organisations films were exhibited and addresses were given at various centres by medical and lay speakers.

Cost. The total approximate expenditure on the prevention, diagnosis, and treatment of venereal diseases during the financial year 1923-24 was £2,135, and it is estimated that during 1924-25 the cost will be £2,166; 75 per cent. of these sums will be recoverable from the Ministry of Health.

VII. MATERNITY AND CHILD WELFARE.

Midwives' Acts, 1902-1903. The number of midwives on the local roll is 26 as against 25 in the preceding year; 10 others, resident outside the district, have given notice of their intention to practise in the Borough; all are trained except one. To the above figures may be added five midwives practising in local Maternity Homes.

Minor irregularities in the observance of the Rules of the Central Midwives' Board have been under consideration on several occasions during the year; failures to forward notification of birth or form of record of sending for medical help have been dealt with by cautionary notice, while one midwife guilty of serious neglect by omitting to obtain medical treatment in a case of ophthalmia neonatorum, received severe censure after full consideration of all the circumstances.

Regulations of the Central Midwives' Board require medical help to be sought by the midwife in all cases of illness of the patient, or the child, or of any abnormality occurring during pregnancy, labour, or lying-in, and 319 records of sending for medical help were received. Fourteen of the calls were on account of abnormalities during pregnancy, 235 during labour, 29 during the puerperal period, and 41 for conditions affecting the child.

Under the 1918 Act the Local Supervising Authority is responsible for the payment of fees to doctors called in by midwives, and with the continuance of the unemployment in the town there was a further increase in the number of such accounts received in respect of cases where the doctor himself was unable to recover the fee; 144 accounts, totalling £240 13s. 0d., were sent in, as compared with 132 accounts, totalling £217 1s. 0d., in 1922, and 109 accounts, totalling £176 13s. 6d., in 1921. In respect of this sum, the contributions to be asked of the patients were assessed at £60 16s. 6d.

Payment of Midwives' Fees. As from 1st April, 1922, the Council took over from the Health Society the responsibility for the payment of midwives' fees in approved necessitous cases. Applications in respect of this service are considered with full information as to the family income and outgoings, and are granted only on satisfactory evidence that the applicant is not entitled to maternity benefit under the National Insurance Acts. During the year 25 applications were received and 19 were granted.

Puerperal Infection and Mortality. Five cases of puerperal fever were notified; all recovered. Four cases of death during pregnancy or parturition occurred, the causes of death being registered respectively as (1) Uterine haemorrhage, asthenia; (2) Embolism of cerebral artery following childbirth; (3) Ante-partum haemorrhage, shock; and (4) Childbirth, contracted pelvis, operation of craniotomy.

The four deaths thus resulting from or in connection with childbirth give a rate of one maternal death for every 500 births, compared with one for every 293 in 1922, and one for every 414 in 1921.

Milk Assistance Scheme. The Council's Milk Assistance Scheme, under which dried milk is granted on the Clinic Medical Officer's recommendation to infants, expectant and nursing mothers, in necessitous cases falling within a certain income scale, continued in force. During the early part of the year it was supplemented to a small extent by the reference of a few cases to the Poor Law Medical Officer, and throughout the whole year by similar grants from the Bootle Health Society to necessitous cases which the Municipal Scheme was unable to help. In all, milk to the value of £243 17s. 10d. was granted by the Council to infants under 12 months of age and to nursing and expectant mothers, on the advice of the Medical Officer, as compared with £245 4s. 2d. during 1922, and £371 10s. 2d. during 1921.

Towards the end of the year it was plain that it was not within the power of the Clinic Medical Officer to limit his recommendations to the number provided for in the current year's estimates, and the corresponding allocation for 1924-25 has accordingly been increased to £300, which will allow grants of one pound of dried milk weekly to about 90 of the 2,000 babies under the age of one year.

Ante-Natal Clinics. In view of the general experience referred to in previous years of the relatively slow expansion of this branch of Maternity and Child Welfare work, it is gratifying to record that the local progress resulting from the opening of the second Ante-Natal Clinic at Marsh Lane three years ago is still maintained, and that during the year 341 new cases in all presented themselves for examination and advice; this is more than double the number of new cases in 1919, and means that one in every six expectant mothers attended for consultation. A brief summary of the work done is given on page 58, to which it may be added that during the year cases of threatened eclampsia, of

contracted pelvis requiring induction of premature labour, and of syphilis, have been brought under treatment through the agency of the Ante-Natal Clinics.

Dental Treatment of Expectant and Nursing Mothers. It is satisfactory to record the signs of growing appreciation of dental treatment amongst nursing and expectant mothers, the importance and value of which to both the mother's and the infant's health are increasingly recognised by the medical and dental professions. The work has been in the nature of extractions, fillings and the supply of artificial teeth, and during the year 28 cases were treated, at an estimated cost of £75 4s. 0d., of which the patients' contributions were assessed at £21 1s. 0d.

Maternity Home. The Maternity Home is now established as a useful and popular element in the Council's Maternity and Child Welfare Scheme, and during the year 109 patients were admitted. The average duration of stay of patients in the Home was 14·4 days; 73 cases were delivered by the nursing staff, 29 cases were delivered by doctors, and 7 cases were admitted for ante-natal treatment. Medical assistance was called by the Matron on 14 occasions for ante-natal conditions, on 20 occasions during labour, once for an eclamptic fit after labour, and three times on account of debility of the infant from premature or twin birth.

The reasons for admission to the Maternity Home have been fairly divided between medical or obstetric indications, which obtained in 39 cases, and lack of suitable accommodation in the patient's home, which was the determining cause for admission in most of the remainder.

The medical or obstetric indications for admission were :—

Disproportion between pelvis and foetal head (including ten cases for induction)	...	...	...	...	20
Albuminuria	...	...	...	...	8
Severe vomiting during pregnancy	...	...	...	...	4
Former post-partum haemorrhage	...	...	...	...	3
Previous stillbirths or miscarriages	...	...	...	...	2
Varicose veins	...	...	...	...	1
Prolapsus uteri	...	...	...	...	1

Attention may be directed to the ten cases in which the onset of labour was artificially induced before full term; they included two cases

in primiparae, and in nine a living child was born; the tenth case, in which the child was still-born, was a case of hydramnios in which craniotomy had been performed on a previous child.

Only on two occasions did the temperature rise above $100\cdot4^{\circ}$ for 24 hours with rise of pulse rate, one being a case of pneumonia, and the second case being apparently one of mild sepsis following upon induction in which there was moderate pyrexia from the fourth to the seventh day. There was one maternal death, occurring on the day after delivery, due to shock and haemorrhage following upon prolonged and difficult labour outside the Home, in which the child had to be delivered after craniotomy. There were nine foetal deaths (still-born or within ten days of birth), seven in which the child was still-born, one in which the child died twenty minutes after birth and showed many congenital defects, and one in which death occurred on the second day due to debility from twin birth. All the still-born cases were examined post-mortem for spirochaetes with negative results.

The standard of six guineas for a fortnight's nursing and maintenance is reduced in approved cases according to the Council's income scale; during the year 11 cases were assessed at higher fees, 35 at the standard charge, and 57 at reduced fees (including 30 at maternity benefit); the average assessment working out at £4 13s. 4d.

The approximate gross cost of the Home in the twelve months ended 31st March, 1923, is estimated to be £1,523, and the net cost to the rates (after deducting patients' contributions of approximately £500 and Exchequer grant) to be £512.

INFANT WELFARE.

Notification of Births Acts. The number of births notified under these Acts was 1,853 or 92·7 per cent. of those registered; 1,795 notifications were received from midwives, 57 from doctors, and one from a parent; 172 notifications of live-birth and 7 of still-birth were also received of births to parents who normally resided elsewhere. The babies were visited shortly after birth by the Infant Welfare Visitors, unless it was considered that suitable advice could be obtained from other sources. A summary of the work of the Infant Welfare Visitors is given on page 58.

Births Registered. The number of births registered in the district was 2,159, from which 235 are to be deducted as born in Bootle Institutions to residents of other districts, and to which are to be added 75 births to Bootle parents temporarily out of the town; the corrected figure is therefore 1,999. Of the number registered 56 were illegitimate.

Still-births. Still-births numbered 76, as compared with 58 during 1922, 75 during 1921, and 77 during 1920. As full an investigation as possible has been obtained in respect of each such case, and 32 of the foetuses were obtained and forwarded for pathological examination.

Infant Deaths. There were 170 deaths of infants under the age of twelve months, which, expressed as a rate per 1,000 births, gives an infant mortality rate of 85, compared with 80 during 1922, 96 during 1921, and an average of 111 in the decennium of 1913-1922.

Although the figure constitutes a small increase over that for 1922, the excess cases (representing only ten additional deaths) may probably be interpreted as falling within the possible chance variation arising from the relatively small population concerned. The progressive improvement in infant mortality is well illustrated when this year's figure is compared with successive quinquennial periods as set out in the table below:—

Years.			Bootle.	England and Wales.	
1901-05	...	...	166	...	138
1906-10	...	...	130	...	117
1911-15	...	...	133	...	110
1916-20	...	...	103	...	91
1921	...	...	96	...	83
1922	...	...	80	...	77
1923	...	...	85	...	69

Further, Bootle occupied a very favourable position in comparison with other Lancashire industrial areas, a position which is all the more satisfactory when it is noted that the town had the highest birth rate of any of the seventeen County Boroughs, and that it is a common experience for a high birth rate to be associated with a high infantile mortality rate. The provisional vital statistics given in the Registrar-General's Quarterly Return published in February, 1924, show that three only of the seventeen County Boroughs (*viz.*: Southport, Blackpool

and Warrington) had a lower infantile mortality rate, and these districts returned birth rates of 14.1, 14.9, and 22.5 respectively, as contrasted with 24.5 in Bootle.

The usual excessive incidence of infant deaths in Mersey and Knowsley Wards obtained as in previous years, the approximate rates varying from 110 in Mersey, 100 in Knowsley, down to 87 in Derby, 76 in Stanley, 75 in Orrell, and 60 in Linaere.

The rate of infantile mortality amongst legitimate infants was 84 per 1,000 births, and amongst the illegitimate it was 125. The more important of the causes of death, which are given in detail on page 48, were prematurity 41, bronchitis and pneumonia 36, atrophy, debility, and marasmus 22, and diarrhoea and enteritis 17.

Neo-Natal Mortality. Thirty-five children died before they were a week old, and a total of 70, or 41 per cent., of all the deaths under one year occurred in children under the age of one month. This is a neo-natal mortality rate of 35 per 1,000 births, compared with 32 in 1922 and 37 in 1921.

Ophthalmia Neonatorum. Thirty-one cases were notified during the year, compared with 35 in 1922, and 36 in 1921, the rates per 1,000 births being 15.5 for 1923, and 17.1 for 1922. In addition two cases came to light in which no notification had been received, and in one of which the ophthalmia was followed by blindness; neither of these cases is included in the tabular statement following:—

Cases.			Vision Unim- paired.	Vision Im- paired.	Total Blind- ness.	Deaths.
Notified.	Treated.					
	At Home.	In Hospital.				
31	29	2	29	—	—	2

Health Visiting Staff. The Health Visiting Staff remains at the equivalent of four whole-time visitors, five actually being engaged, of whom two devote half their time to tuberculosis visiting. In February, 1923, the Ministry of Health had expressed the opinion, formed after inspection by their officers, that the staff was inadequate for the work

to be done; accordingly, at the end of the year, when increased attendances at the Infant Consultations made it evident that the number of their weekly sessions must be increased, with a resulting greater call for clinic duties and a corresponding diminution in the amount of home visiting done by the staff, it was decided to appoint an additional Health Visitor to commence duty in April, 1924. The help and instruction given in the home are probably the most valuable part of the whole Maternity and Child Welfare Scheme, and no effort should be spared to secure that the best teaching is given in the best possible way. During the year it was possible to give on the average rather more than four visits to each infant under one year of age, two visits to each child in its second year, and one visit to each child between the age of two and five years. This last age group, for varying reasons, hardly receives the attention which it needs either in the home or from public agencies, although it is during these years that defects are arising and habits are being formed which will call for the services of the Education Committee's medical staff on the child's entry to school.

The statistical presentation of the work of the Infant Welfare Visitors is given on page 58; there it will be seen that 22,087 visits were paid, of which 8,435 were devoted to infants under the age of twelve months.

Infant Welfare Clinics. An Infant Consultation is held once weekly in each of the three Centres maintained by the Bootle Health Society. The increased total of attendances which has again to be recorded made it apparent towards the end of the year that larger numbers would interfere with the medical efficiency of the clinics, and the Health Society willingly agreed to the Council's proposal to divide the two largest clinics and to hold an additional weekly session at each. The proposal has been under the consideration of the Ministry of Health for some time, and it is hoped to commence the new arrangements in April, after which it is expected that the number of infants seen daily by the Medical Officer will be small enough to enable advice to be given not only on the method of feeding, but also on the important matters of clothing and of general hygiene. It is expected that a similar division of the third clinic, at which the attendances are almost as large, cannot be indefinitely delayed, while it should also be mentioned that the holding of two sessions weekly at St. Matthew's Hall does not fully meet the needs of the growing population in the new housing

estate at Orrell where, however, no building suitable for an Infant Consultation is at present available.

During the year the number of new infants presented for examination and advice at all Centres was 919, as compared with 847 in 1922, and 844 in 1921. The total attendances throughout the year show a more than corresponding increase to 13,783, as compared with 11,877 in 1922, and 10,996 in 1921. The average attendance of infants at each meeting was 85·4 at St. Matthew's Hall, 99·2 at the School Medical Offices, and 87·4 at the Marsh Lane Clinic.

The Sewing Classes held in connection with the Balliol Road and Marsh Lane Clinics continued their excellent work in giving instruction and help in the making-up of infants' clothing. As has been said before, a large extension of this work is desirable, as inculcating self-help in a direction likely to lead to improvement of the health and comfort of infants and young children.

Cost. The net cost of all the above Maternity and Child Welfare Services during the financial year 1923-24 was £2,953 approximately; the estimated net expenditure during 1924-25 is £3,565; 50 per cent. of these sums will be recoverable in grant from the Ministry of Health.

Bootle Health Society. Gratitude must again be expressed to this voluntary Society for the very active part it plays in partnership with official agencies in all work for promoting maternity and child welfare. Its financial transactions increase in size year by year, and it continues to supply the non-professional workers at each of the five clinics held weekly throughout the year; it is entirely responsible for the conduct of the Sewing Classes; it gives help in kind to necessitous cases by the loan of maternity bags, the provision of fireguards, and by the gift of dried milk in cases not eligible under the Council's milk assistance scheme. With the pending extension of the Infant Welfare Clinics, however, the need for new helpers will become more evident; the Society now conducts a business on which a large clientèle has come to depend, and the unexpected absence of one or two members at once disorganises the working of the machinery. It is desirable, therefore, that pairs of workers should be associated, so that during vacations as well as at other times a substitute will be available without calling on the services of the Society's officers.

VIII. PUBLIC HEALTH EDUCATION.

This section of Public Health activity constitutes the third of three stages into which the sanitary work of the last eighty years can be divided, and follows logically upon the labours of the years up to 1890, during which, of necessity, attention had to be concentrated on environment, and of the years between 1890 and 1910, during which the lessons of bacteriology were being applied to the control of communicable diseases. Educational work is the natural and inevitable outcome of these stages, and although yet in its infancy promises to produce far-reaching results just in proportion as it can be made really to influence the practice of personal hygiene.

“ Education then is the keynote of the modern campaign for public health. Tuberculosis and infant mortality are pre-eminent among all the causes of preventable disease and death as the two greatest scourges, from the abatement of which the largest results for humanity are to be attained. In each case the fight must be won, not by the construction of public works, but by the conduct of the individual life. The same thing is true with regard to the spread of the acute contagia, the burden of venereal disease, the obscure ill effects of defective eyes and ears and teeth, and a dozen other problems which in greater or lesser degree concern the public health. In every one of these cases the results we are striving for can only be reached by spreading a clear knowledge of the ways in which disease spreads, and the ways in which it is prevented, among the mothers who bring up the babies and the men who pay rent in the tenements and work in the stores and factories.” (Winslow—“ The Evolution and Significance of the Modern Public Health Campaign.”)

Advice, therefore, falls to be given on the real values of various foodstuffs, on the importance of sunlight and of cool, moving air, on the care of the teeth, on sexual hygiene, and on the means to combat specific diseases such as tuberculosis and the venereal diseases; and this advice must be given in part by the individual teaching of health visitors and medical officers, in part by the adoption of ordinary commercial publicity methods.

The importance of such propaganda work is realised locally, and the last few years have seen successive small extensions. The part played by health visitors or school nurses in home visiting cannot be

over-stressed; but a visit which does not leave the mother more fit to deal with the particular problem of the moment—the care of her own health before confinement, the feeding of the baby, the protection of a case of measles from pneumonia, or the general dietary of the family—is rarely worth recording. The work is arduous if well done, but is more fruitful in results than forms of propaganda work directed to the public in mass, and it is satisfactory to note, therefore, that the pending appointment of an additional health visitor will, in spite of the opening of two additional clinics, enable at least as much individual instruction to be given during the current year.

In other directions useful work has been done by the delivery of addresses to a number of existing organisations at their periodical social or business meetings. A large variety of health topics has been dealt with by the Medical Officer of Health and other medical speakers, and the meetings have included four dinner-hour addresses to the employees of large works, and the lowest estimate of their value will, I think, allow that they are useful in preparing the ground for individual instruction obtained in other ways. The work will, however, inevitably extend, the most suggestive developments being the devotion of greater attention to the teaching of personal hygiene to the young during and shortly after school life, and the examination of the possibilities of cinematograph and wireless installations in broadcasting similar knowledge.

IX. NURSING ARRANGEMENTS, HOSPITALS AND OTHER INSTITUTIONS AVAILABLE FOR THE DISTRICT.

Professional Nursing in the Home. The services of the Bootle District Nurses' Association are available for the nursing in their own homes of patients suffering from puerperal fever, measles, whooping cough, epidemic diarrhoea, ophthalmia neonatorum, pneumonia, and poliomyelitis; information as to cases requiring such attention is derived from the health visiting staff, and the financial arrangements with the Association provide for payment by the Council of an annual retaining fee of £35, together with a charge of 8d. per visit in approved cases. The classification of such work by the District Nurses' Association follows:—

			Carried over from 1922.	New Cases.	Total.	Total Visits.	Removed to		Refused further treatment.	Under treat- ment at end of 1923	
							Died.	Hospital.	Improved.		
Ophthalmia Neonatorum			—	40	40	1178	1	5	31	—	3
Pneumonia	—	28	28	712	4	3	20	—	1
Tuberculosis	1	1	2	265	1	—	—	—	1
Diarrhoea	—	19	19	209	3	1	15	—	—
Whooping Cough	1	—	1	12	—	—	1	—	—
Measles	—	4	4	103	—	—	4	—	—
Mastitis	—	3	3	53	—	1	2	—	—
Other Diseases	—	5	5	60	1	—	3	1	—
Totals	2	100	102	2592	10	10	76	1	5

Midwives. Forty-one midwives signified their intention to practise within the district during the year commencing 1st January, 1923. Apart from the Staff of the Municipal Maternity Home, there is no direct employment of or subsidy to practising midwives, although since 1st April, 1922, responsibility has been accepted for the payment of the midwife's fee in such cases as are sanctioned by the Maternity and Child Welfare Sub-Committee after consideration of the patient's income, size of family, etc.

Clinics, Treatment Centres, Hospitals, Ambulance Facilities.—The arrangements provided or subsidised by the local authority in respect of the above remained as described in the Annual Report for 1922.

X. HOUSING.

It is regrettable that no progress in housing provision during 1923 can be reported in spite of efforts made to initiate schemes under the Housing, etc., Act, 1923. The Council's first offer of a subsidy of £100 per house built in accordance with the statutory conditions, having failed, increased consideration was offered to the extent of £100 per house together with the construction of roads and sewers free of cost to the builder, but again without securing firm proposals to build for letting. It is satisfactory, however, to note that advance may be expected in 1924, as the Council in February decided to take over from the Assisted Housing Scheme Account the surplus land on Site No. 1, and to invite tenders for the erection of 100 houses thereon with a view to the sale of such houses to applicants in accordance with the Small Dwellings Acquisition Act.

The following tabular statement shows what was accomplished by the Council's first Housing Scheme:—

Number of houses completed during 1920 ...	...	...	26
Number of houses completed during 1921 ...	...	...	76
Number of houses completed during 1922 ...	...	...	200
Number of houses completed during 1923 ...	...	...	Nil

A special report was presented during the year based on the Registrar-General's Analysis of Census Statistics for the County of Lancaster, and extracts bearing on the housing conditions prevailing at the Census of June, 1921, are reproduced for reference:—

Size and Occupation of Dwellings. In Bootle 92 per cent. of structurally separate dwellings were returned as private houses; there were 5·39 rooms per dwelling; 1·17 families per dwelling; 4·80 persons per family; and 0·95 rooms per person. There was an increase of 927 dwellings as defined above, and an increase of 1,913 private families since the census of 1911. 8,726 persons were returned as living more than two persons to a room, as contrasted with 6,283 in 1911—this is the standard commonly applied, in the absence of a legal definition, to determine overcrowding.

The maximum excess in the number of families over dwellings appears to be attained in Ashton-in-Makerfield (1·21 families per dwelling), followed by Fleetwood (1·20), Abram (1·18), Bootle (1·17), and Wigan (1·17).

Size of Families. The average number of persons per family in Bootle, given above as 4·80, indicates a diminution in the size of the family from 4·97 at the census of 1911. This diminution is observed in all but nine of the areas in the county for which comparative figures are available; the biggest families were found in Haydock (5·42 persons per family), St. Helens (5·09), and Widnes (5·03), and the smallest in Wardle (3·55) and Norden (3·60)—the County average being 4·27.

DEFICIENCY OF ROOMS IN BOOTLE IN 1921 ON BASIS OF ENGLAND AND
WALES STANDARD, 1911.

The Registrar-General has suggested that for the purpose of providing index figures by means of which housing conditions in any area may be compared with those of another area, the density ratios (average rooms per person in all families) for England and Wales, 1911, may be adopted as a convenient standard; by applying this ratio to the number of families of the several sizes in an area, a hypothetical number of rooms is obtained which by comparison with the actual number of rooms enumerated will indicate the deficiency of accommodation in that area on the basis of the general standard of housing in England and Wales, 1911. It should be emphasized, however, that the choice of this standard ratio implies no judgment as to the sufficiency or insufficiency of any given number of rooms for families of a particular size; it merely represents the actual conditions obtaining in the country as a whole at a comparatively recent date.

By this method the Registrar-General gives the calculated deficiency of rooms in Bootle in June, 1921, as 1,693, equivalent to 314 houses; to this figure may be added 4,977 rooms, or 923 houses, in respect of the estimated increase of 5,093 in the population by the mid-year, 1923, making a total deficiency of 1,237 houses; from this figure may be deducted 249 in respect of houses taken into occupation subsequent to June, 1921, leaving a requirement of 988 houses in order to house the 1923 population of Bootle on the basis of the actual experience of the Country in 1911.

Average Number of Rooms per Person. For the whole of England and Wales in 1911 this figure was 1·05; in Lancashire in 1921 it was 1·02, in Liverpool it was 0·98, and in Bootle it was 0·95.

The important information emerging from the Registrar-General's report hereon is that 1,266 persons had less than 0·3 rooms per person; 7,426 had 0·3 and under 0·5 rooms per person; 20,342 had 0·5 and under 0·7 rooms per person; and 15,010 had 0·7 and under 1 room per person.

Size and Occupation of Dwellings.—(a) There were 617 dwellings consisting of 1—3 rooms which were occupied as to 593 by one private family, as to 22 by two families, and as to 2 by three or more families.

There were 8,104 dwellings consisting of 4—5 rooms, occupied as to 6,964 by one private family, as to 1,055 by two private families, and as to 85 by three or more private families; these two sub-divisions represent 66 per cent. of the total dwellings in Bootle, and house 64 per cent. of the total private families.

(b) The following table shows the percentage of private families occupying from one room upwards:—

		ROOMS														
		1	2	3	4	5	6	8-9	10 & over							
County	...	2.2	...	6.9	...	13.1	...	36.4	...	23.8	...	13.3	...	3.1	...	1.2
Bootle	...	4.1	...	11.0	...	10.8	...	16.9	...	32.3	...	18.9	...	4.9	...	1.1

These facts can be put in another way by stating that 647 private families, consisting of 1,562 persons, occupy 646 rooms in all; and further, 1,721 private families, consisting of 5,667 persons, occupy 3,439 rooms in all.

Housing (Inspection of District) Regulations, 1910. The programme of routine inspection of working-class property outlined in the Survey of Housing Needs returned to the Ministry of Health in 1919 was commenced in October, 1920, and is nearing completion. Up to the end of the year 1,101 houses had been so inspected, and had been rendered fit as the result of action taken either by proceedings under Section 28 of the Housing, Town Planning, &c., Act, 1919, or in consequence of informal action by the Authority or their officers.

A statistical summary of information concerning action taken with reference to housing conditions follows:—

UNFIT DWELLING-HOUSES.

I. *Inspection.*

(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	1792
(2) Number of dwelling-houses which were inspected, and recorded under the Housing (Inspection of District) Regulations, 1910	79
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	Nil
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation,	1781

II. *Remedy of Defects without Service of formal Notices.*

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	1257
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III. *Action under Statutory Powers.*

A. Proceedings under section 28 of the Housing, Town Planning, etc., Act, 1919—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	Nil
(2) Number of dwelling-houses which were rendered fit—	
(a) by owners	23
(b) by Local Authority in default of owners	—
(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close	Nil

B. Proceedings under Public Health Acts—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	483
(2) Number of dwelling-houses in which defects were remedied—	
(a) by owners	453
(b) by Local Authority in default of owners	Nil

C. Proceedings under sections 17 and 18 of the Housing, Town Planning, etc., Act, 1909—

(1) Number of representations made with a view to the making of Closing Orders	Nil
(2) Number of dwelling-houses in respect of which Closing Orders were made	Nil
(3) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit	Nil
(4) Number of dwelling-houses in respect of which Demolition Orders were made	Nil
(5) Number of dwelling-houses demolished in pursuance of Demolition Orders	Nil

APPENDIX 1—

VITAL STATISTICS OF WHOLE DISTRICT DURING 1923 AND PREVIOUS YEARS.

YEAR.	Population estimated to middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS		NETT DEATHS BELONGING TO THE DISTRICT			
		Un- corrected Number.	Nett.		Number.	Rate.*	of Non- residents registered in the District. 8	of Residents not registered in the District. 9	UNDER ONE YEAR OF AGE		AT ALL AGES.	
			Number.	Rate.					Number.	Rate per 1,000 Births	Number.	Rate
1	2	3	4	5	6	7	8	9	10	11	12	13
1914.	73,230	2,279	2,321	31·7	1,033	14·1	54	263	286	123	1,212	17·0
1915.	Civil 71,617 Total 74,285	2,023	2,050	27·6	1,054	14·7	62	294	292	142	1,286	17·9
1916.	Civil 71,135 Total 77,396	2,047	2,076	26·8	1,101	15·5	80	258	227	109	1,279	18·0
1917.	Civil 68,871 Total 76,772	1,853	1,873	24·4	1,022	14·1	91	281	187	99	1,213	17·6
1918.	Civil 73,500 Total 80,500	1,781	1,810	22·5	1,224	16·6	63	268	210	116	1,429	19·4
1919.	Civil 77,000 Total 80,500	1,860	1,914	23·9	988	12·7	79	245	184	96	1,154	15·0
1920.	80,029	2,255	2,289	28·6	1,000	12·5	59	195	223	97	1,136	14·2
1921.	77,800	2,142	2,068	26·6	817	10·5	43	236	198	96	1,010	13·0
1922.	79,750	2,144	2,051	25·7	877	11·0	42	258	164	80	1,093	13·7
1923.	81,580	2,159	1,999	24·5	858	10·5	50	262	170	85	1,070	13·1

* These rates are based on the uncorrected numbers.
Area of District in acres, (land and inland water) = 1,947.

APPENDIX II.

POPULATION AS ENUMERATED AT CENSUS, 1921.

				Area in Statute Acres.	1911 Persons.	1921			Persons per Acre.
						Persons.	Males.	Females.	
BOOTLE, C.B. ...				1947	69876	76487	37405	39082	39·3
WARDS—									
Derby ...				481	14473	15647	7639	8008	32·5
Knowsley...				298	12309	13787	6965	6822	46·3
Linacre ...				294	15770	17413	8374	9039	59·1
Mersey ...				308	12053	12599	6310	6289	40·9
Orrell ...				370	3907	5394	2635	2759	14·6
Stanley ...				196	11364	11647	5482	6165	59·4

				Private Families.	Population in Private Families.	Struc- turally Separate Dwellings	Rooms occupied.	Rooms per person.	
BOOTLE, C.B. ...				15650	75096	13320	71701	0·95	
WARDS--									
Derby ...				3244	15604	2891	15477	0·99	
Knowsley ...				2778	13690	2171	11364	0·82	
Linacre ...				3596	17382	3146	16492	0·95	
Mersey ...				2511	11430	1810	10219	0·89	
Orrell ...				1098	5394	1067	4674	0·87	
Stanley ...				2423	11596	2235	13575	1·17	

APPENDIX B.

CASES OF INFECTIOUS DISEASES NOTIFIED DURING THE YEAR 1923.

NOTIFIABLE DISEASES.	NUMBER OF CASES NOTIFIED.										Total Cases Notified in each Locality (e.g., Parish or Ward) of the District.						Total cases removed to Corporation Hospital or Sanatorium.
	At all Ages.	At Ages—Years.									Derby Ward.	Stanley Ward.	Mersey Ward.	Knowsley Ward.	Linacre Ward.	Orrell Ward.	
		Under 1 year	1 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.									
Smallpox ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cholera-Plague ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria (including Membranous Croup) ...	86	3	29	37	10	6	1	—	—	—	—	—	—	—	—	—	75
Erysipelas ...	22	1	1	6	1	4	8	—	—	—	—	—	—	—	22	15	—
Scarlet Fever ..	231	2	45	153	21	10	—	—	—	—	79	18	16	26	45	47	181
Typhus Fever...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever ...	2	—	—	—	1	1	—	—	—	—	—	—	1	—	—	1	—
Relapsing Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Continued Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever ...	5	—	—	—	3	2	—	—	—	2	—	—	1	—	2	—	—
Cerebro-spinal Meningitis ..	2	—	—	2	—	—	—	—	—	1	—	—	—	—	—	—	—
Polio-myelitis ..	3	—	1	—	1	1	—	—	—	1	—	1	1	—	—	—	—
Pulmonary Tuberculosis ..	236	—	5	28	50	102	47	4	—	42	—	28	52	51	45	18	143
Other forms of Tuberculosis ..	66	1	24	20	13	7	1	—	—	9	—	7	12	16	11	11	—
Ophthalmia Neonatorum ..	31	31	—	—	—	—	—	—	—	5	—	9	6	7	3	1	—
*Infantile Diarrhoea ..	47	19	28	—	—	—	—	—	—	—	—	5	21	8	11	2	—
Influenzal Pneumonia ..	2	—	—	1	1	—	—	—	—	—	—	—	1	1	—	—	—
Acute Primary Pneumonia ..	72	13	30	10	5	5	4	5	—	5	—	—	46	15	5	1	—
Trench Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Encephalitis Lethargica ..	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery ...	6	—	1	5	4	3	1	—	—	6	—	—	2	—	2	—	—
Totals ...	826	70	164	263	110	141	62	10	—	167	81	187	140	149	96	—	299

* Voluntary notification of cases under the age of two years during July, August and September.

Isolation Hospital or Hospitals, Sanatoria, etc.:—Corporation Hospital, Linacre Lane, Eccle; Bootle Sanatorium, Maghull.

CAUSES OF, AND AGES AT, DEATH DURING THE YEAR 1923.

CAUSES OF DEATH.			NET DEATHS AT THE SUMOINED AGES OF "RESIDENTS" WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.									TOTAL DEATHS WHETHER OF "RESIDENTS" OR "NON-RESIDENTS" IN INSTITUTIONS IN THE DISTRICT
			All ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 & under 25 years.	25 & under 45 years.	45 & under 65 years.	65 and upward.	
All causes {	Certified	1037	163	67	48	34	48	144	257	276	131	
	Uncertified	33	7	..	..	..	..	5	9	12	1
Enteric Fever ... ..			..	..	..	..	..	..	..	..	..
Small-pox ... ..			..	..	..	..	..	..	..	..	..
Measles			25	6	10	8	1	..	..	..	2
Scarlet Fever			2	..	..	..	2	..	..	..	6
Whooping Cough			14	2	8	2	1	1	..	..	1
Diphtheria and Croup			2	1	..	..	1	..	..	..	3
Influenza			10	..	..	..	1	2	4	3	..
Erysipelas			1	1	..	..	..	..	..	..	..
Phthisis (Pulmonary Tuberculosis)			103	..	1	..	3	20	41	35	7	
Tuberculous Meningitis			11	3	2	3	1	1	..	..	1
Other Tuberculous Diseases			21	3	3	1	5	2	6	1	6	
Cancer, malignant disease			73	..	..	..	1	2	8	39	23
Rheumatic Fever			2	..	..	..	1	..	..	1	1
Meningitis			17	5	2	5	1	2	1	1	3	
Organic Heart Disease			65	..	..	..	2	2	12	26	23
Bronchitis			85	9	5	..	1	..	4	18	18	
Pneumonia (all forms)			149	27	28	15	7	3	17	32	20	
Other diseases of respiratory organs			13	1	..	2	..	..	1	7	2
Diarrhoea and Enteritis			23	17	2	2	..	..	2	..	4
Appendicitis and Typhlitis			2	..	..	..	1	1	..	..	4
Cirrhosis of Liver			2	..	..	..	..	..	1	1	..
Alcoholism ... ..			..	..	..	..	..	..	..	..	..
Nephritis and Bright's Disease			30	..	..	..	..	2	3	16	9
Puerperal Fever ... ..			..	..	..	..	..	..	..	..	..
Other accidents and diseases of Preg- nancy and Parturition			4	..	..	..	..	..	4	..	1
Congenital Debility and Malformation, including Premature Birth			80	78	2	..	..	..	..	..	8
Violent Deaths, excluding Suicide			39	..	2	5	3	3	6	12	8	
Suicide			5	..	..	..	..	..	4	1	..
Other Defined Diseases			280	16	2	5	3	8	35	68	143	
Diseases ill-defined or unknown... ..			12	1	..	..	..	..	2	5	4
Totals			1970	170	67	48	34	48	149	266	288	132

SUB-ENTRIES INCLUDED IN ABOVE FIGURES.

Cerebro-spinal Fever	...	...	...	2	..	..	1	..	1	..	..	..	1
Poliomyelitis	...	...	...	..	..	..	..	..	..	..	..	..	..
Broncho-pneumonia	...	...	...	75	20	25	12	5	1	1	5	8	8
Venereal Diseases	...	...	...	3	2	..	1	..	..	..	..	..	..
Cerebral Hæmorrhage	...	...	...	31	..	..	..	..	1	1	9	20	1
Arterio-Sclerosis	...	...	...	27	..	..	..	..	..	..	8	19	1
Senile Decay	...	...	...	45	..	..	..	..	..	..	..	45	..
Tetanus	...	...	...	..	..	..	..	..	..	..	..	..	..
General Paralysis of Insane	...	...	...	5	..	..	..	..	..	3	2	..	..
Aneurism	...	...	...	..	..	..	..	..	..	..	..	..	..
Locomotor Ataxy	...	...	...	2	..	..	..	..	..	..	2	..	..

INFANT MORTALITY.

1923. Nett Deaths from stated causes at various Ages under 1 Year of Age.

CAUSE OF DEATH.	Under 1 week.							Total under 4 weeks.	3—4 weeks.	2—3 weeks.	1—2 weeks.	3 months and under 6 months.	6 months and under 9 months.	9 months and under 12 months.	Total Deaths under One Year.
	Under 1 week.	1—2 weeks.	2—3 weeks.	3—4 weeks.	4 weeks.	4 weeks and under 3 months.	3 months and under 6 months.								
All Causes	(Certified { Uncertified	31 4	16 —	13 —	6 —	66 4	21 —	33 2	17 —	26 1	163 7				
Small-pox	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chicken-pox	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria and Croup	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculous Meningitis	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Abdominal Tuberculosis	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Tuberculous Diseases	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningitis (not Tuberculous)	...	1	—	—	—	1	1	2	—	—	5	—	—	—	—
Convulsions	...	2	—	—	—	2	—	—	—	—	4	—	—	—	—
Laryngitis	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bronchitis	...	—	1	—	—	1	2	4	2	—	9	—	—	—	—
Pneumonia (all forms)	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diarrhoea	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteritis	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gastritis	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Syphilis	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rickets	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Suffocation, overlying	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Injury at Birth	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Atelectasis	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Congenital Malformations	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Premature Birth	...	7	—	2	1	10	2	—	2	—	15	—	—	—	—
Atrophy, Debility and Marasmus	...	21	7	6	2	36	2	3	—	—	41	—	—	—	—
Other Causes	...	3	3	1	—	9	5	5	2	—	22	—	—	—	—
	...	1	2	1	—	4	1	1	—	2	8	—	—	—	—
Totals		35	16	13	6	70	21	35	17	27	170				
Nett Births in the year	{ legitimate infants ...1,943														
	{ illegitimate infants... 56														
	Nett Deaths in the year	{ legitimate ... 163 illegitimate... 7													

APPENDIX 6.

SUMMARY OF WORK DONE BY THE SANITARY INSPECTORS.

NUISANCES—

No. of complaints made by inhabitants	1397
---------------------------------------	-----	-----	-----	-----	-----	-----	------

No. of nuisances discovered	3026
-----------------------------	-----	-----	-----	-----	-----	-----	------

Notices to owners—

Choked and defective drains	...	...	...	...	...	373
Choked and defective downspouts and raingutters	...	...	...	...	...	381
Defective roofs	...	...	...	...	...	424
Defective yard surfaces	...	...	...	...	...	171
Defective water pipes	...	...	...	...	...	37
Other defects	...	...	...	...	...	1575

Notices served on occupiers—

Overcrowding in rooms	...	...	...	...	...	2
Dirty conditions	...	...	...	...	...	8
Removing fowls and other animals	...	...	...	...	...	16
Removing manure	...	...	...	...	...	15
Removing rubbish	...	...	...	...	...	7
Non-separation of sexes	...	...	...	...	...	2

No. of defective ashbins renewed	...	...	...	...	...	164
No. of re-inspections of nuisances	...	...	...	...	...	10994
No. of informations laid	...	...	...	...	...	3
No. of Magistrates' Orders obtained	...	...	...	...	...	1
Amount of Fines and Costs	...	...	...	...	...	£1 8s. 0d

CINEMATOGRAPH SHOWS—

There were six picturedromes in the town, and they received fifty-eight inspections

CANAL BOATS—

No. of canal boats inspected	...	...	...	...	...	139
„ infringements <i>re</i> certificates	...	...	...	...	...	1
„ other defects	...	...	...	...	...	—
„ notices sent in respect of same	...	...	...	...	...	1

COMMON LODGING HOUSES—

No. registered under the Public Health Act, 1875	...	...	...	...	3
No. of inspections	...	...	...	...	114
„ informations laid in respect of infringements	...	...	...	...	—

SUB-LET HOUSES—

No. of inspections	...	...	...	...	...	105
„ infringements of bye-laws relating to sub-let houses	...	...	...	...	...	4
„ informations laid	...	...	...	...	...	—
Amount of Fines and Costs	...	...	...	...	...	—

STEPS TAKEN TO PREVENT NUISANCE FROM SMOKE—

No. of observations made	...	...	...	...	...	...	...	129
„ intimations sent	...	...	...	...	...	...	...	31
„ notices served in respect of excessive black smoke	...	...	...	...	...	...	...	6
„ informations laid	...	...	...	...	...	...	...	1
Amount of fines and costs	...	...	...	...	...	...	...	12/-

DAIRIES, COWSHEDS, AND MILKSHOPS—

No. of milkshops on register	...	...	...	...	...	...	...	36
„ shippens with dairies attached	...	...	...	...	...	...	...	25
„ inspections made—shippons 451, milkshops 276	...	...	...	...	...	...	...	727

The occupiers of shippens and milkshops have from time to time been verbally cautioned with regard to the cleanliness of the premises and the cows, the proper storage of milk, and the covering of milk vessels.

FOOD INSPECTIONS—

No. of visits to foodshops	...	...	...	...	...	...	...	3672
Amount of food seized (see page 13).								
No. of inspections of hawkers' carts	...	...	...	...	...	...	...	202
No. of inspections of food factories	...	...	...	...	...	...	...	184

SUMMARY OF LEGAL PROCEEDINGS—

Defective drains, etc.	...	...	...	...	...	...	...	2
Infringements of Sale of Food and Drugs Acts	...	...	...	...	...	...	...	8
Smoke nuisances	...	...	...	...	...	...	...	1
Common lodging houses	...	...	...	...	...	...	...	—
Sub-let houses	...	...	...	...	...	...	...	—
Unsound food	...	...	...	...	...	...	...	—

INSPECTIONS OF HOUSES MADE UNDER INCREASE OF RENT

AND MORTGAGE INTEREST (RESTRICTIONS) ACT	...	...	...	...	...	...	...	13
No. of Certificates issued by Local Authority	...	...	...	...	...	...	...	9
Work completed before Certificate was issued	...	...	...	...	...	...	...	4

DISINFECTION : INFECTIOUS DISEASES—

No. of houses disinfected after notifiable infectious diseases	...	...	...	...	...	...	...	324
„ houses disinfected after phthisis	...	...	...	...	...	...	...	188
„ premises disinfected after measles	...	...	...	...	...	...	...	1
„ visits made to infected houses	...	...	...	...	...	...	...	344
„ re-visits made to infected houses	...	...	...	...	...	...	...	457
„ houses cleaned in default of or at request of owners	...	...	...	...	...	...	...	29
„ houses disinfected for causes other than fevers	...	...	...	...	...	...	...	15

All houses assessed at £15 per annum or less are cleaned after infectious disease (i.e., the walls stripped and the ceiling whitened), by the Corporation at their own cost; in case of phthisis the Corporation strip, when necessary, whatever the rent.

FILTHY HOUSES—

No. of houses reported	...	...	...	...	...	...	...	18
„ intimations sent	...	...	...	...	...	...	...	18
„ houses cleansed	...	...	...	...	...	...	...	18

LIST OF ARTICLES DISINFECTED—

							Bootle.	Formby.	Totals.
Paillasses	...	...	...	...	...	...	221	5	226
Mattresses	...	...	...	...	...	...	254	6	260
Beds	...	...	...	...	...	...	494	10	504
Bolsters and Pillows	...	...	...	...	...	...	1259	46	1305
Blankets	...	...	...	...	...	...	994	28	1022
Quilts	...	...	...	...	...	...	614	16	630
Sheets	...	...	...	...	...	...	820	24	844
Carpets	...	...	...	...	...	...	122	7	129
Wearing Apparel	...	...	...	...	...	...	2423	83	2506
Miscellaneous Articles	...	...	...	...	...	...	701	39	740
							<u>7903</u>	<u>264</u>	<u>8166</u>

NOTE.—These figures do not include the ambulance bedding (one bed, one pillow, and three blankets), which is disinfected after the removal of each case.

Sixty-five library books were disinfected.

The following articles were destroyed at the request of the owners:—

Wearing Apparel, 8; Mattresses, 6; Pillows and Bolsters, 7; Beds, 9; Miscellaneous, 9.

FLUSHING.

The flushing gang consists of two Corporation workmen and a Liverpool waterman.

No. of private houses at which drains were flushed	...	...	...	...	...	...	12122
No. of passage sewers flushed	...	...	...	...	...	...	724

Drains were flushed at public buildings 82 times.

The drains at the Bootle Borough Hospital, the Bootle Hospital Nurses' Home, the Bootle Maternity Home (51, Balliol Road), and the Liverpool Maternity Home in Hawthorne Road were each flushed 12 times during the year.

The amount of fresh water used during the year was 2,822,820 gallons. The amount of salt water was 56,130 gallons.

FACTORY AND WORKSHOP ACT.

WORKSHOPS AND WORKPLACES (excluding Bakehouses)--

No. on register	...	...	...	...	...	...	...	98
No. of visits and re-visits	...	...	...	...	...	...	...	545
" workrooms with dirty walls	...	...	...	...	...	...	...	—
" " " ceilings	...	...	...	...	...	...	...	—
" " " floors	...	...	...	...	...	...	...	3
" " " lavatories	...	...	...	...	...	...	...	5
" " not properly ventilated	...	...	...	...	...	...	...	—
" " found overcrowded	...	...	...	...	...	...	...	—
" defective drains and water closets	...	...	...	...	...	...	...	3
" miscellaneous defects found	...	...	...	...	...	...	...	3
" notices issued to occupiers	...	...	...	...	...	...	...	8
" notices issued to owners	...	...	...	...	...	...	...	3
" notices complied with	...	...	...	...	...	...	...	9
" references to the Factory Inspector	...	...	...	...	...	...	...	1

FACTORIES—

No. of visits and re-visits	...	...	...	...	...	...	...	196
.. with insufficient or unsuitable sanitary accommodation	...	...	...	...	...	...	...	1
.. referred to Borough Engineer	...	...	...	...	...	...	...	1

BAKEHOUSES—

No. on register	... ..	29
No. of visits and re-visits	... ..	192
" bakehouses found dirty (walls and ceilings and floors)	... ..	—
" notices issued for limewashing	... ..	—
" notices issued for dirty yard surface	... ..	—
" bakehouses not in use at end of year	... ..	—

CONFECTIONERY BAKEHOUSES—

[illegible]

OUTWORKERS—

No. of outworkers on register at end of year ...	...	...	...	...	4
„ visits and re-visits made to houses of outworkers ...	...	...	...	...	16
„ notices served for sanitary defects at houses of outworkers ...	...	...	...	...	—

Outworkers employed in Bootle for Liverpool firms engaged in:—

[illegible]

Outworkers employed in Liverpool and Stafford for Bootle firms engaged in :—

Boot Repairing	...	...	...	...	...	...	...	...
Tailoring	...	..	...	...	...	...	...	...
Hosiery	...	...	...	...	...	...	...	...

APPENDIX 7.

SALE OF FOOD AND DRUGS ACTS.

SAMPLES TAKEN, 1923.

		Total Number of Samples Analysed	Number re- ported to be adulterated or not up to standard	Number of Prosecutions	Number of Convictions	Remarks
Milk	... ..	102	13	7	7	(In the 6 cases not pro- ceeded with, the adul- teration was so trivial as not to warrant pros- ecution.
Butter	... ..	45	..	...	..
Baking Powder	..	2	...	...	...	see page 14
Lemon Cheese	...	2	2	...	...
Self-raising Flour		4	...	...	...	see page 15
Medicine	... ..	10	4	1	1	
Pepper	... ..	2	...	...	...	see page 15
Lard...	... ..	6	...	...	...
Rice	... ..	2	1	...	...	see page 15
Cocoa	..	3	...	...	...
Castor Oil	... ..	1	...	...	...	see page 14
Lemonade	..	2	..	..	...
Sarsaparilla	... ..	1	...	...	..	see page 14
Cheese	... ..	3	...	...	...
Potted Shrimps	...	2	2	1	1	see page 14
Ginger Beer	..	2	...	...	...
Milk Powder	..	4	...	...	...	see page 14
Barm Beer	...	1	...	..	...
Custard Powder	...	2	..	...	...	see page 14
Preserved Cream	...	2	...	...	...
Camphor and Oil	...	1	...	...	...	see page 14
Calves Feet Jelly	..	1	...	...	..
Treacle	... ..	1	...	...	...	see page 14
Ginger Ale	... ..	1	...	...	...
Totals	...	202	22	9	9	

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

Summary of Notifications received during the period from 31st December, 1922 to 29th December, 1923.

Notifications on Form A.

AGE-PERIODS	Number of Primary Notifications										Total Primary Notifications	Total Notifications on Form A.	
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65			65 and upwards
Pulmonary, Males	2	6	7	7	16	23	19	22	10	3	120	137
" Females	..	3	8	7	10	15	27	17	9	4	1	101	118
Non-pulmonary, Males	..	11	5	7	4	2	2	..	1	..	..	32	37
" Females	..	13	4	3	4	2	5	..	..	..	..	32	33

Number of Notifications on Form C.

Notifications on Form B.

AGE-PERIODS	Number of Primary Notifications				Total Primary Notifications	Total Notifications on Form B.	Poor Law Institutions	Sanatoria
	Under 5	5 to 10	10 to 15	15 to 20				
Pulmonary, Males	77
" Females	55
Non-pulmonary, Males	1	...	1	1	...	3
" Females	4

SUPPLEMENTAL RETURN.

New cases of Tuberculosis coming to the knowledge of the Medical Officer of Health or Chief (Administrative) Tuberculosis Officer during the period from the 31st December, 1922, to the 29th December, 1923, OTHERWISE than by notification on Form A or Form B under the Public Health (Tuberculosis) Regulations, 1912.

AGE PERIODS	55											Total Cases
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	
Pulmonary Males ...	..	..	..	1	3	1	5	2	4	2	..	18
" Females ..	..	1	1	..	1	..	5	2	2	2	..	14
Non-pulmonary Males ...	5	5	..	..	..	2	..	..	..	1	..	13
" Females ..	..	2	..	1	1	..	1	..	..	..	..	5

APPENDIX 9.

VENEREAL DISEASES TREATMENT CENTRE. COPY OF REPORT BY
DR. CLEMMEY.

	Syphilis.		Soft Chancre.		Gonorrhœa.		Conditions other than Venereal.		TOTAL.	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Female
1. §Number of persons who, on the 1st January, 1923, were under treatment or observation for:—	94	46	3	—	70	2	4	3	171	51
2. Nmmber dealt with during the year in the out-patient Clinic <i>for the first time</i> and found to be suffering from:—										
Syphilis only	134	52	—	—	—	—	—	—	134	52
Soft chancre only	—	—	1	—	—	—	—	—	1	—
Gonorrhœa only	—	—	—	—	147	9	—	—	147	9
§Syphilis and soft chancre	—	—	—	—	—	—	—	—	—	—
§Syphilis and gonorrhœa	—	—	—	—	—	—	—	—	—	—
§Gonorrhœa and soft chancre	—	—	—	—	—	—	—	—	—	—
§Syphilis, soft chancre and gonorrhœa	—	—	—	—	—	—	—	—	—	—
Conditions other than venereal	—	—	—	—	—	—	17	—	17	—
TOTAL—Item 2.	134	52	1	—	147	9	17	—	299	61
*TOTAL—Items 1 and 2.	228	98	4	—	217	11	21	3	470	112
3. §Number of persons who ceased to attend the out-patient Clinic										
(a)—before completing a course of treatment for:—	26	8	—	—	24	—	—	—	50	8
(b)—after one or more courses but before completion of treatment for:—	20	9	—	—	—	—	—	—	20	9
(c)—after completion of treatment, but before final tests as to cure of:—	35	23	2	—	31	1	—	—	68	24
4. †Number of persons transferred to other Treatment Centres after treatment for:—	17	—	—	—	20	—	—	—	37	—
5. §Number of persons discharged from the out-patient Clinic after completion of treatment and observation for:—	45	15	—	—	68	—	13	3	126	18
6. §Number of persons who, on 1st January, 1924, were under treatment or observation for:—	85	43	2	—	74	10	8	—	169	53
*Total—Items 3, 4, 5 and 6	228	98	4	—	217	11	21	3	470	112
7. Out-patient attendances—										
(a)—For individual attention by the Medical Officer	1441	414	21	—	1809	138	132	—	3403	552
(b)—For intermediate treatment, e.g., irrigation, dressings, etc.	23	—	—	—	815	—	—	—	838	—
Total Attendances	1464	414	21	—	2624	138	132	—	4241	552
8. Aggregate number of "In-patient days" of treatment given to persons who were suffering from:—	54	74	—	—	161	—	—	—	215	74
9. Examinations of Pathological material:—										
(a) Specimens which were examined at, and by the Medical Officer of, the Treatment Centre					Nil	18		Nil	Nil	
(b) Specimens from persons attending at the Treatment Centre which were sent for examination to an approved laboratory					Nil	Nil		Nil	314	

§ The number of persons suffering from two or more venereal diseases should be entered under the heading of each disease in the vertical column.

* The total of Items 1 and 2 should agree with the total of Items 3, 4, 5, and 6, so far as Syphilis, Soft Chancre, and Gonorrhœa are concerned.

† These persons should not be included in Items 3 (a) or 3 (b) or 3 (c).

§ Statement showing the services rendered at the Treatment Centre during the year, classified according to the areas in which the patients resided.

Name of County or County Borough (or Country in the case of persons residing elsewhere than in England and Wales).	Bootle.	Liverpool.	Lancs.	Other areas.	Total.
A. §Number of persons from each area dealt with during the year at or in connection with the out- patient Clinic <i>for the first time</i> and found to be suffering from :—					
†Syphilis	104	24	31	27	186
†Soft chancre	—	1	—	—	1
†Gonorrhœa	66	21	40	29	156
Conditions other than venereal	9	3	4	1	17
TOTAL ...	179	49	75	57	360
B. §Total number of attendances at the out-patient Clinic of all patients residing in each area ...	3095	593	917	185	4793
C. §Aggregate number of "In-patient days" of all patients residing in each area	97	93	64	35	289
D. Number of doses of arsenobenzol compounds given in the :—					
1. Out-patient Clinic	511	84	238	77	910
2. In-patient Dept.	5	2	3	2	12
to patients residing in each area					
E. Give the names of arsenobenzol compounds used in the treatment of syphilis and the usual initial and final doses.	Neokharsivan } From 0.45 grms. Novarsenobillon } to 0.9 „				
F. State the amount and kind of treatment usually administered to a case of Syphilis of each of the types usually dealt with at the Treatment Centre.	Intramuscular injections of Iodo-Bismuthate of Quinine are also used. Six at least to commence, often up to twelve and repeated after blood test whether positive or negative until case shews repeated negatives.				
G. State the nature of tests applied in deciding as to discharge of patients referred to in Item 5 on previous page.	Syphilis—Repeated negative Wassermann tests. Gonorrhœa—After satisfactory evidence that there is no gonorrhœal and urethral discharge and no gonococci.				

§ The totals in Item A should agree with the corresponding totals in Item 2 on the previous page, and the totals in items B and C should agree with the respective totals in Items 7 and 8 on the previous page.

† If a person has been treated for both syphilis and gonorrhœa, he should be included under both diseases, and similarly for other combinations of venereal diseases.

25th February, 1924.

W. N. CLEMMIEY,
Medical Officer of the Treatment Centre,

APPENDIX 10.

VENEREAL DISEASES.

Annual Return of Pathological Examinations made during the year ended on the 31st December, 1923.

	No. of Tests.			
At the University of Liverpool—				
For detection of spirochaetes—For Treatment Centre	—
For Practitioners	—
For detection of gonococci—For Treatment Centre	1
For Practitioners	1
For Wassermann reaction—For Treatment Centre	321
For Practitioners	35
				<hr/> 358

APPENDIX 11.

WORK DONE BY THE WELFARE VISITORS.

Total visits paid	...	...	...	...	...	...	...	...	22087
First visits to infants	...	...	...	...	...	...	...	...	2135
Routine visits to infants	...	...	...	...	...	...	...	...	6300
Visits to children, aged 1 to 2 years	...	...	...	...	...	...	...	...	3660
Visits to children, aged 2 to 5 years	...	...	...	...	...	...	...	...	5257
First visits to expectant mothers	...	...	...	...	...	...	...	...	553
Routine visits to expectant mothers	...	...	...	...	...	...	...	...	834
Ophthalmia Neonatorum—first visits	...	...	...	...	...	...	...	...	53
“ “ routine visits	...	...	...	...	...	...	...	...	126
Special visits to cases of Diarrhoea	...	...	...	...	...	...	...	...	319
“ “ Measles	...	...	...	...	...	...	...	...	930
Visits re still-births	...	...	...	...	...	...	...	...	89

APPENDIX 12.

ANTE-NATAL CLINICS.

JANUARY 1st, 1923, to DECEMBER 31st, 1923.

	Balliol Road Clinic.		Marsh Lane Clinic.		Totals.
Number of times Clinics opened	...	51	...	51	102
Number of attendances made	...	1222	...	713	1935
Number of new cases	...	203	...	138	341
Number of patients under treatment at end of 1922	...	49	...	14	63
Normal labour	...	153	...	83	236
Abortion	...	1	...	1	2
Stillbirth	...	6	...	4	10
Lived few days	...	1	...	1	2
Difficult labour	...	5	...	6	11
Not pregnant	...	7	...	9	16
Transferred	...	6	...	—	6
Cases attending, relieved	...	18	...	5	23
Died during Labour—Haemorrhage	...	1	...	—	1
Number under treatment at end of 1923	...	50	...	38	88
Wassermann—					
Positive	...	—	...	1	1
Slightly positive	...	—	...	—	—
Negative	...	7	...	2	9
Smears taken for Gonococci—					
Positive	...	—	...	—	—
Negative	...	—	...	—	—

APPENDIX 13.
LINACRE HOSPITAL.—REVISED DIAGNOSES AND COMPLICATIONS.

SCARLET FEVER ADMISSIONS.	Boothle	Litherland	DIPHTHERIA ADMISSIONS.	Boothle	Litherland
Re-diagnosed as :—			Re-diagnosed as :—		
Scarlet Fever and Measles ...	2	2	Diphtheria and Scarlet Fever ...	4	3
Scarlet Fever and Diphtheria ...	1	—	Diphtheria and Measles ...	1	—
Scarlet Fever and Mumps ...	—	1	Diphtheria and Chronic Hydrocephalus ...	—	1
Scarlet Fever and Pertussis ...	—	1	Scarlet Fever ...	5	2
Scarlet Fever and Chickenpox ...	1	—	Scarlet Fever and Measles ...	1	—
Scarlet Fever and Appendectomy ...	1	—	Scarlet Fever and Congenital Syphilis	—	1
Scarlet Fever and Tubercular Glands of Neck ...	1	—	Measles ...	2	—
Measles ...	3	—	Tonsillitis ...	20	4
Tonsillitis ...	1	2	Tonsillitis and Chickenpox ...	—	1
Tonsillitis and Septic Erythema	1	—	Vincent's Angina ...	3	—
Erythema ...	1	—	Catarrhal Laryngitis ...	2	—
Erythema Scarlatiniforme ...	1	—	Bronchitis ...	2	—
Urticaria ...	1	1	Adenitis (Cervical Glands) ...	2	—
Toxic Erythema ...	1	—	Coryza ...	1	—
Erysipelas ...	1	—	Quinsy ...	1	—
German Measles ...	1	—	Teething ...	1	—
Mumps ...	1	—			
Totals ...	18	7	Totals ...	45	12

APPENDIX 14.

LOCAL POWERS RELATING TO PUBLIC HEALTH.

(1) ACTS OF PARLIAMENT ADOPTED BY THE COUNCIL.

Infectious Disease (Notification) Act, 1889.

Infectious Disease (Prevention) Act, 1890, sections 5, 6, 14, 15, 16, 17, 18, 20 and 21.

Public Health Acts Amendment Act 1890, Part III.

Housing of the Working Classes Act, 1890, Part III.

Notification of Births Act, 1907.

Sections 22, 23, 24, 33, 35, 44, 50, 51, 52, 53, 54, 55, 57, 61, 62, 63, 64, 65, 69, 70, 71, 72, 73, 74, 75, 85, 90, 91, 93 and 95, Public Health Acts Amendment Act, 1907.

(2) BOOTLE CORPORATION ACTS AND ORDERS.

Bootle Corporation Act, 1890.

Bootle Order, 1897; confirmed by the Local Government Board's Provisional Orders Confirmation (No. 16) Act, 1897, relative to Sanitary Improvements.

Bootle Corporation Act, 1899.

Bootle Order, 1914; confirmed by the Local Government Board's Provisional Orders Confirmation (No. 6) Act, 1914, relating to the substitution of moveable ash-pits for fixed ash-pits.

Bootle Corporation Act, 1920.

(3) BYE-LAWS AND REGULATIONS IN FORCE IN THE BOROUGH.

New Streets and Buildings, 1869.

Nuisances, 1887.

Slaughter Houses, 1887.

Good Rule and Government, 1888.

New Streets and Buildings, 1890.

Common Lodging Houses, 1894.

Dairies, Cowsheds, and Milksheds, 1894 and 1902.

Carriage of Offensive Matter through Streets, 1898.

New Streets and Buildings and Alteration of Buildings, 1899.

Removal of House Refuse and Nuisances, 1899.

Structure of Walls of New Buildings, 1900.

Structure of Foundations of New Buildings and Construction of New Streets, 1904.

Hospitals provided by the Corporation, 1904.

Houses let in lodgings, or occupied by members of more than one family, 1904.

New Buildings. Ashpits in connection with Buildings Removal of House Refuse and Nuisances, 1907.

New Streets (width), 1908.

Construction of Walls of New Public Buildings and New Warehouse Buildings, 1910.

Parasitic Mange—Regulations as to cleansing and disinfection, 1910.

Houses let in lodgings, 1912.

